Attachment 2
Summary of Public Comments Received on Indiana's Draft 2014 303(d) List of Impaired Waters and the Consolidated Assessment and Listing Methodology Published on April 30, 2014 and IDEM's Responses

The Indiana Department of Environmental Management (IDEM), Office of Water Quality is required by Section 303(d) of the federal Clean Water Act to assess its waters for compliance with the state's water quality standards and periodically prepare and make public a list of those waters not meeting water quality standards. On April 30, 2014, IDEM published its draft 2014 303(d) List of Impaired Waters with a ninety (90) day public comment period from April 30 through July 29, 2014, for submission of comments on the draft 303(d) List of Impaired Waters. IDEM received comments from the following parties during the comment period:

Alliance for the Great Lakes (AGL)
Sierra Club, Hoosier Chapter (SC)

Comment: It appears that IDEM hasn't reviewed its [TMDL] priorities in a number of years. The exact same language used to explain its priorities that appears in the 2014 draft may be found in IDEM's 2010 and 2012 303(d) lists (2010 303(d) Attachment 7, p. 7-1; 2012 303(d) Attachment 2, p. 2-10). (SC)

IDEM Response: *In 2012, IDEM re-evaluated its TMDL priorities and developed a program plan of action for TMDL prioritization, development, and implementation based on the primary goal of making measurable improvements in water quality by doing the following: 1) developing a TMDL document that is implementable by stakeholders, 2) instituting a TMDL development process that supports and augments other OWQ programs and objectives, and 3) developing a TMDL implementation tracking system for following-up to determine effectiveness. IDEM's goal is to develop TMDLs that when implemented, will result in measurable improvements in water quality. To realize this goal, prioritization will be driven by analysis of the data and knowledge of activities and stakeholders in the watershed as well as other agency program activities that predict water quality improvements. Since then, IDEM has been working to further refine its prioritization process based on U.S. EPA's National Water Program Guidance (U.S. EPA, 2015) and U.S. EPA's Long Term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program (U.S. EPA, 2013).*

Comment: The U.S. Environmental Protection Agency published a *PCB TMDL Handbook* on December 20, 2011[1]. For IDEM to continue to maintain that "EPA has not provided adequate guidance to states regarding how to develop a TMDL to restore a waterbody with fish tissue impairments" in the 2012 and now the draft 2014 303(d) lists suggests that the department is either woefully ill-informed about TMDL developments nationally or it is intentionally misleading the public. At a minimum, IDEM should mention the existence of the handbook. If it

[1] http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/upload/pcb_tmdl_handbook.pdf

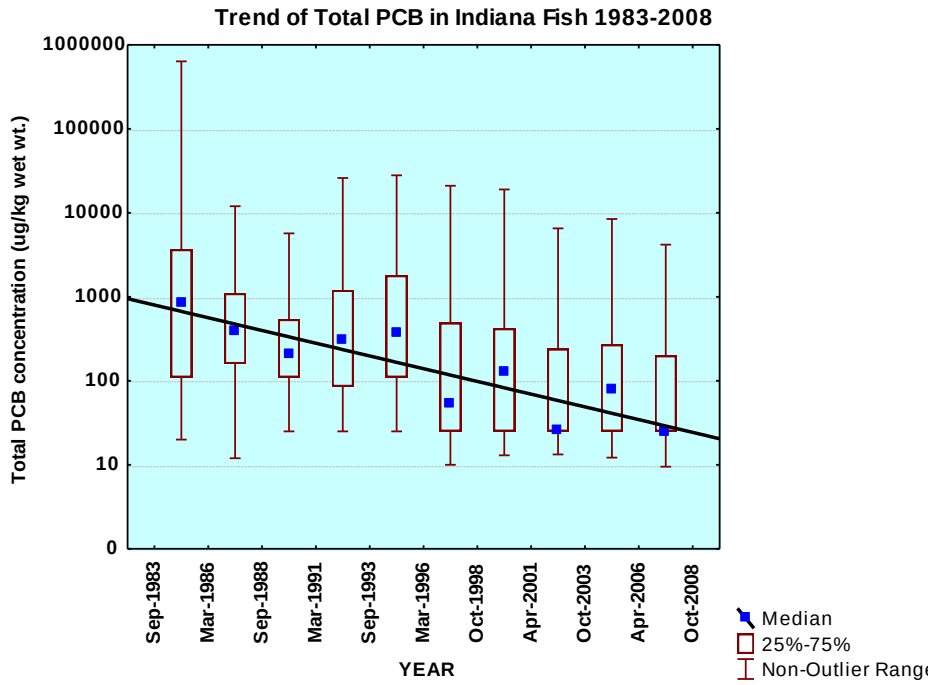
feels that the handbook does not provide "adequate guidance" it should explain why it thinks this. If it continues to insist that "a TMDL is not the appropriate approach for addressing these impairments", it should discuss what approach it does consider appropriate. (SC)

IDEM Response: *IDEM has reviewed the U.S. Environmental Protection Agency's PCB TMDL Handbook and, as stated in IDEM's Integrated Report attachments, has found the approach in this guidance of limited effectiveness in addressing PCBs.*

Where site remediation is not occurring through CERCLA or the State Clean Up Program, IDEM asserts that natural attenuation is the best approach to the restoration of waters impaired for PCBs in fish tissue. IDEM has been monitoring the streams in Indiana most heavily impacted by PCBs (those for which clean-up activities have or are happening) as well as other streams identified on Indiana's 303(d) list as impaired for PCBs in fish tissue for more than three decades. The data from this monitoring have provided a significant body of evidence that strongly suggests PCB concentrations in fish tissue are going down even in waters where no active remediation is or has taken place. In the 2014 Integrated Report submitted on April 1, 2014, IDEM provided evidence with its evaluation of data from 1983-2008 that supports its position that time is a successful remediation strategy for PCBs.

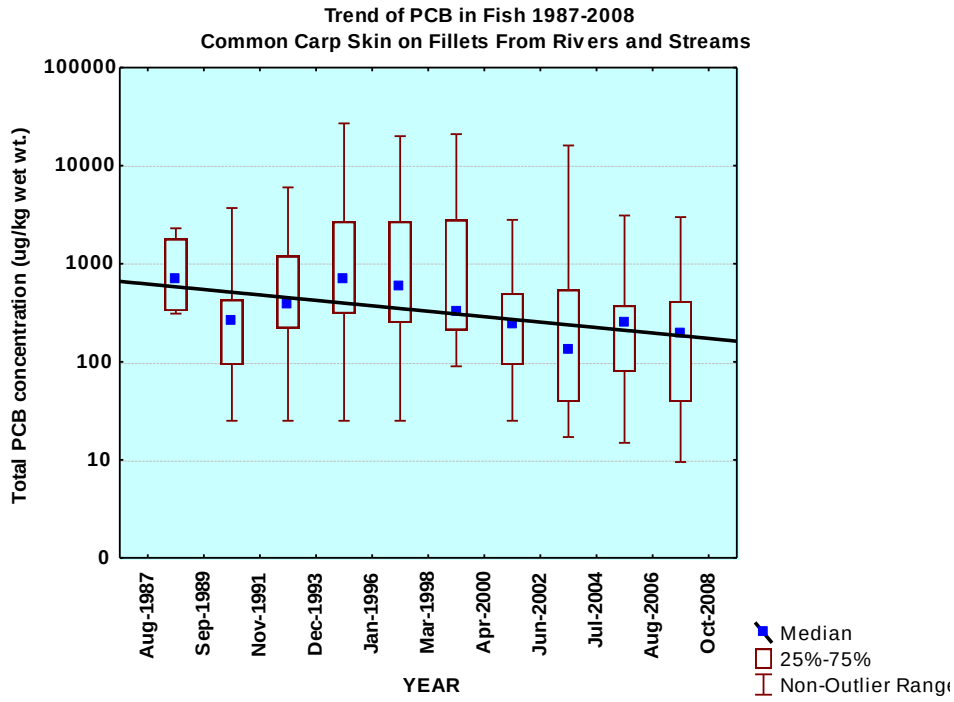
The most effective remediation strategy for PCBs – other than natural attenuation– is physical removal of the contaminated sediments. Dredging makes sense for some waters, especially for those that are highly contaminated. However, a large number of streams on Indiana's 303(d) list for PCBs in fish tissue are smaller streams. Dredging every stream impaired for PCBs in fish tissue would be extremely damaging to the habitat and biota and would likely impair the streams' ability to support aquatic life for a considerable amount of time. Additionally, it would be costly. Thus, for these smaller waterbodies, dredging would do more harm than good. Natural attenuation of this banned substance poses less risk to the environment and is a more cost effective approach to addressing PCB impairments than dredging.

Trend of Total PCB in Indiana Fish 1983-2008.



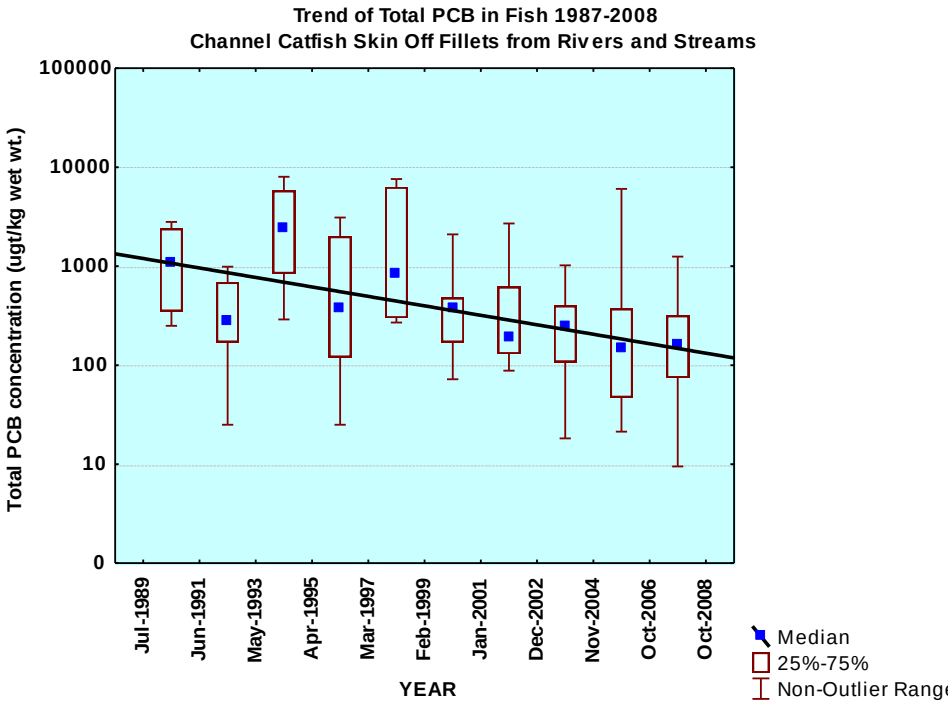
Source: IDEM 2014 Integrated Report.

Trend of PCB in Fish 1987-2008 for Common Carp Skin-on Fillets from Rivers and Streams.



Source: IDEM 2014 Integrated Report.

Trend of PCB in Fish 1989-2008 for Channel Catfish Skin-off Fillets from Rivers and Streams.



Source: IDEM 2014 Integrated Report.

Comment: IDEM places waters with PCB and/or mercury fish-tissue impairments in category 5B saying "the state believes that a conventional TMDL is not the appropriate approach." It adds that "the state will continue to work with the general public and the U.S. EPA on actual steps needed ultimately to address these impairments." We repeat the question we raised in our comments on this language in the 2012 303(d) list: What has IDEM done in the past two years to work with the general public or the E.P.A to take "actual steps" to address fish tissue impairments? (SC)

IDEM Response: *With regard to mercury in fish tissue, IDEM revised its methodology in accordance with U.S. EPA guidance in order to gain a better understanding of where consumption of fish poses the greatest health risk due to mercury contamination. IDEM maintains that in order to address any environmental problem, it must first have an accurate assessment of where those problems exist.*

With regard to PCBs, IDEM has reviewed U.S. EPA's PCB TMDL handbook and continues to evaluate approaches used in other states for their potential use is developing TMDLs for fish tissue impairments here in Indiana. In 2014, IDEM submitted a proposal to U.S. EPA for contractor support to conduct a statewide trend analysis of PCBs in fish tissue to help IDEM identify areas where PCB concentrations have remained constant or increased over time. IDEM is also currently evaluating the feasibility of including PCB impairments in its TMDL for the Mississinewa River, which will be developed over the course of the next two years.

IDEM has maintained a strong and dedicated monitoring effort to continue better understanding contaminants in fish, communicating that information to other agencies and to the interested general public, working with the Indiana State Department of Health to develop fish consumption advisories, and communicating risks as well as benefits from eating Indiana wild caught fish. Continuing to understand the status and trends of contaminants, and communicating health risk information are the first lines of defense in protecting public health for these particular contaminants of concern.

Comment: PCB fish tissue contamination is the third largest cause of impairment for Indiana's flowing waters as measured in impaired stream miles (after *E. coli* and impaired biotic communities) and by far the largest cause of impairment for the state's lakes (38,290 acres, compared to 16,385 acres for the next two largest causes, chlorophyll-a and taste and odor). See tables 11 and 20 in Appendix A of the *Integrated Water Monitoring and Assessment Report* ("Integrated Report"). On page 49 of the Integrated Report, IDEM reports that PCB levels in fish tissue have declined over a 25-year period, which it depicts in Appendix C, Figures 8, 9 and 10. However, the apparent declines may be a construct of the year used as the first measurement, which are different in each figure. In any case, the most recently reported levels remain well above recommended health guidelines. People should not have to wait several more decades of inaction on IDEM's part in hopes that the levels diminish to a point that it becomes once again safe to eat fish.(SC)

IDEM Response: *The declines in PCB concentrations shown in the figures provided in the 2014 Integrated Report are based on all the data available at the time the analysis was conducted; thus, the first measurement shown in each figure is the first result available for the associated data type.*

IDEM has been quite active in abating site specific PCBs, and some examples of remediation success stories follow:

Polychlorinated Biphenyls in the Bloomington and Bedford Areas

Sampling of fish, water, and sediments for PCB contamination in Clear Creek, Salt Creek, Pleasant Run, and the East Fork White River in Monroe and Lawrence counties in the late 1970s and1980 revealed high levels of PCBs at localities in these streams. In the mid-1970s, effluent from the Bloomington sewage treatment facility discharging to Clear Creek, and the General Motors Central Foundry plant discharging to Pleasant Run near Bedford were found to contain higher than acceptable levels of PCBs. Clear Creek, and Salt Creek downstream from Monroe Reservoir and the East Fork White River as far down as Williams, IN were heavily contaminated with PCBs. Clear Creek received PCB contaminated effluent from the Winston Thomas WWTP. In addition to these, PCBs were found to be emanating from local Bennett's, Lemon Lane and Neal's landfills causing PCB contamination in Stouts Creek, Bean Blossom Creek, Conard's Branch, and Richland Creek as well. All of these landfills have a history of receiving PCB wastes. The PCBs in the fish of Pleasant Run Creek were the highest we had ever measured anywhere in Indiana fish. Pleasant Run added to the PCB contamination of lower Salt Creek and the East Fork White River.

Fish Consumption Advisories (NO CONSUMPTION due to PCBs)

1978: Clear Creek, Salt Creek downstream of Monroe Reservoir Dam, and East Fork White River from confluence with Salt Creek to Williams, IN
1982: Richland Creek in Monroe, Owen, and Greene counties.
1987: Pleasant Run Creek, Lawrence County

Considerable monies have been spent over the last three plus decades by the City of Bloomington, the State of Indiana, U.S. EPA, Westinghouse Corporation, and General Motors to eliminate the direct discharge of PCBs in these streams. These efforts have included stream sediment and soil removals, capping, and capturing and treating PCB contaminated leachate from the landfills to prevent continued contamination of these affected streams. The result of these activities has translated to a continued slow, but sure reduction of PCBs in the fish from these streams. For example, Pleasant Run near Bedford, which had as much as 390 parts per million PCBs in the fish in the 1980s and 90s have recently been shown to have levels of PCBs now less than 1.0 parts per million in the fish. Clear Creek has seen a reduction of PCBs in the fish by an order of magnitude since the early 1990s. Analysis on fish samples collected in 2014 from Clear Creek and upper Richland Creek with the U.S. EPA showed PCB reductions in the fish ranging from 89-98% and by as much as 97% since the early 1980s respectively with average concentrations going from as much as 19 parts per million in the fish to as low as 0.2 parts per million. Although there is still a ways to go for the fish in these streams before they can be considered PCB free, these streams are examples of the success of remediation efforts in reducing PCBs in the local fish populations.

There are a number of other streams across the State with similar stories. In the 1980s a number of discharges were identified as contributing to PCB contamination in the Kokomo Creek/Wildcat Creek, Kokomo, IN; Little Sugar Creek/Sugar Creek near Crawfordsville, IN; Little Mississsinewa River near Union City, IN; Elliott Ditch/Wea Creek and the Wabash River near Lafayette; Stoney Creek and the West Fork of White River near Noblesville and Indianapolis to name a few. PCB contamination from Stoney Creek caused NO CONSUMPTION advisories in Stoney Creek and limited consumption advisories in the West Fork White River from Noblesville to the Marion County line. PCBs contamination from the Continental Steel site in Kokomo, IN necessitated NO CONSUMPTION FCA advice in Kokomo Creek and the Wildcat Creek all the way to the Wabash River. The Continental Steel was remediated under Superfund. Recent testing for PCBs in fish from Kokomo Creek showed levels in the low parts per billion range. Although a NO CONSUMPTION FCA still extends in the Wildcat Creek through Carroll County, the FCA for Wildcat Creek in Tippecanoe County is now listing for limited consumption.

Remediation efforts in all of these locations have aided in the reduction of PCBs in the streams and fish. Many of these streams which have been NO CONSUMPTION FCA waterbodies are being considered for removal of the NO CONSUMPTION status to limited consumption advice. Although changes are slow, and numerous samples across multiple years are required before decisions on reductions in NO CONSUMPTION FCA levels occurs, the trend of PCBs in these historically contaminated streams continue to be on positive downward slides.

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Comment: Ironically, the first waterbody where IDEM removed an impairment was Pigeon Creek in southwest Indiana, which the department had placed on the 303(d) list in 1996 due to high levels of the organochlorine pesticide chlordane found in fish tissue. Through the cooperative efforts of residents and government agencies at the local, state and federal level, and with the support of Section 319 funding, the impacted community created a watershed plan and installed more than 50 agricultural best management practices (BMP) between 1997 and 2001 to reduce soil erosion, which was the vehicle that carried the banned pesticide into the water. By 2005 IDEM determined that chlordane levels in fish tissue had dropped sufficiently that the impairment could be removed from the 303(d) list. While in this case IDEM did not prepare a TMDL, the actions taken were consistent with TMDL development and implementation.[2] Given this history of success in addressing fish tissue contamination, we believe IDEM has delayed long enough on PCB fish tissue impairments. (SC)

IDEM Response: *Your position on IDEM's approach to PCB fish tissue impairments is noted and is being taken into account as IDEM further refines its prioritization process for TMDL development. IDEM's application to U.S. EPA for contractor assistance on a statewide trend analysis of PCB in fish tissue has not been funded to date. If and when it is, the public will be notified of this project through IDEM's notice of public comment period for the next draft 303(d) List of Impaired Waters and Integrated Report.*

Comment: [IDEM] is working on TMDLs for three waterbodies at present: the upper Mississinewa, White Lick Creek and southern Whitewater River. IDEM lists numerous PCB fish tissue impairments for both the Mississinewa and Whitewater rivers. The department has information about at least one source of PCB contamination for the Mississinewa since one of its tributaries, the Little Mississinewa, is the site of a Superfund cleanup for PCBs in Union City.[3] IDEM was a partner in the cleanup, which was completed in 2009. It shares responsibility with the E.P.A for post-remediation monitoring, which includes sampling sediments and fish downstream.[4] Since it has already worked on PCB contamination in this watershed, it should add the Mississinewa PCB impairments to the TMDL. (SC)

IDEM Response:*, IDEM is exploring a Category 4B listing for the PCB impairments in the Mississinewa River. As the commenter noted, the primary source of PCBs in this watershed has been remediated, and IDEM continues to monitor fish tissue regularly in this watershed as part of its contaminants monitoring program. If IDEM finds that moving this impairment from Category 5B to Category 4B is supported by the evidence, the case for this listing change will be made in the TMDL document for the Mississinewa River. The public will have an opportunity to review and comment on this proposed change when the draft Mississinewa TMDL, which is currently under development, is published for a 30-day public comment period prior to its submittal to U.S. EPA for approval.*

[2] http://water.epa.gov/polwaste/nps/success319/in_pigeon.cfm
[3] http://www.epa.gov/region5/cleanup/mississinewa/pdf/lmr_fs_200108.pdf
[4] http://www.epa.gov/region5/cleanup/mississinewa/pdf/lmr_5yr_201010.pdf

Comment: While we support continuing to address *E. coli* pollution with TMDLs, particularly because implementation of these TMDLs frequently also reduces other pollutants such as nutrients, we question the wisdom of prioritizing *E. coli* impairments over PCB fish tissue impairments. Since *E. coli* is only an indicator of the possible presence of human pathogens and is meant to provide protection for full-body contact with the water, it makes no sense to prioritize them in some sections of a waterbody where human pathogens are less likely to be found in abundance or where few people have full-body contact with the water. In waterbodies like the Mississinewa, where fishing is known to occur and where sources of PCB contamination of fish have been identified, the highest priority for TMDL development should be addressing this known human health hazard. (SC)

IDEM Response: *IDEM remains open to the idea of developing a PCB TMDL for larger waters where fishing is known to occur and is currently evaluating the feasibility of including PCB impairments in its TMDL for the Mississinewa River.*

Comment: As for mercury fish tissue impairments, we have little reason to hope that IDEM will seek to remedy this problem. We disagree with the use of a "trophic level, consumption rate-weighted arithmetic mean result" (Attachment 1, p. 53) to determine mercury fish tissue impairments. We think that this new method (allowed by guidance that the E.P.A issued in 2010) of listing mercury-impaired waters significantly under-represents the number of waters with fish exposed to methylmercury. However, individual TMDLs are probably not the best way of dealing with this problem. Since the major source of mercury contamination of our waters is through air deposition that results from the burning of coal for electric power generation, it would be better to remedy the situation through a statewide TMDL that would require retirement of coal-burning power plants. We realize that IDEM is not about to pursue such a remedy, so we rely on new rules under the Clean Air Act to reduce mercury and carbon emissions, along with the changing economics of power generation that makes burning coal increasingly unprofitable, to gradually reduce mercury fish tissue impairments despite IDEM's opposition to those rules. (SC)

IDEM Response: *The reason U.S. EPA requires states to include waters with impairments due to mercury in fish tissue on their 303(d) lists is based on concerns regarding human consumption not any deleterious effects that exposure to mercury might have on aquatic life. The exposure of fish to mercury is not the same thing as human health risk associated with the consumption of fish. IDEM's revised methods for assessment of fish consumption take into account important factors that more accurately translate into human health risk, such as consumption rates and the types of fish that might be consumed and thus provides a more accurate assessment of the problem mercury might be creating with regard to consumption.*

Comment: In May 2014 the E.P.A issued its final decision adding approximately 140 metal-impaired stream segments to IDEM's 2010 303(d) list. Most of these waters are impaired for aluminum and/or iron. Some are also impaired for copper, lead and/or zinc. IDEM identified these impairments through the use of derived criteria for dissolved metals or with the use of criteria for total metals. However, at the request of self-interested stakeholders, namely Alcoa,

the Indiana Coal Council and the Indiana Energy Association[5], IDEM decided to remove these impaired waters from the 2010 303(d) list. Although the E.P.A signaled its disagreement with IDEM's decision, the department refused to add these waters to its 2012 list and obstinately continues that refusal with the 2014 list. IDEM should add these impaired waters to its 2014 303(d) list. Its continued refusal to do so is clear evidence that the department favors the interests of the coal industry and coal-burning electric utilities over the public good. (SC)

IDEM Response: *IDEM is keenly interested in public input on its assessment and listing methodology and takes any concerns expressed regarding the defensibility of its methods very seriously. IDEM received numerous public comments during the public comment period for its draft 2010 303(d) list. On the issue of listing waters based on total metals results as opposed to dissolved metals results, there were many and all were in opposition to this approach. Interestingly, there were no comments in support of IDEM's continued use of this approach. IDEM did receive public comments challenging its 2010 decision during the public comment period for the 2012 303(d) list. However, IDEM evaluated these comments and found that they provided no new information that had not already been considered prior to making its decision in 2010.*

IDEM's decision for changing its methods for metals assessments and listing was made after careful consideration of the facts provided by the public, the scientific defensibility of both approaches to metals assessment and the resulting policy implications of each. IDEM's rationale for its decision can be found in previous responses to U.S. EPA comments and public comments on both the 2010 and 2012 303(d) list and will not be repeated here. Those interested in evaluating IDEM's reasons for its decision with regard to metals assessments and listing are invited to review these documents, which along with all public comments received, are available online at http://www.in.gov/idem/nps/3889.htm for the 2010 cycle and at http://www.in.gov/idem/nps/3937.htm for the 2012 cycle.

Comment: IDEM's descriptions of its listing categories are inaccurate. These categories, which are derived from E.P.A guidance, do not provide meaningful information for differentiating the quality of the state's waterbodies and for determining IDEM's ability to assess that quality.

For example, Category 1 is for waters "that meet the requirements of the state's assessment and listing methodology and support a determination that all WQS are attained and no designated use is threatened." In other words, a waterbody that meets all of its designated uses should be listed in Category 1. Category 2 is for waters that meet some but not all of their designated uses. However, since IDEM assigns a category number for each of the three or four uses that a waterbody might have—safe for full-body contact (recreational use, *i.e.*, swimming), safe for fishing and consuming the fish caught (fishable use), safe for aquatic organisms (aquatic life use), and safe as a source of public drinking water (public water supply)—it never assigns a water to Category 1. (SC)

IDEM Response: *The categorization scheme was originally developed by U.S. EPA in 2002. At that time, states were allowed to place a waterbody in only one category based on the worst*

[5] Their comment letters may be accessed on the IDEM 2010 303(d) web page: http://www.in.gov/idem/nps/3889.htm

case. For example, if a waterbody had a recreational use impairment but was otherwise meeting one or more of its other designated uses, the waterbody would have to be reported as impaired. In response to state concerns that this approach did not recognize high quality waters or water quality improvements, U.S. EPA allowed states to begin separately placing a given waterbody into one of the five categories for each designated use. IDEM believes this approach provides a more accurate characterization of water quality in Indiana.

The purpose of the categories in the Consolidated List is to provide all the information IDEM has to date regarding the designated use support status of all Indiana waters.
IDEM's ability to assess water quality and its methods for doing so are described in detail in its Consolidated Assessment and Listing Methodology (CALM).
With regard to the example provided, if a waterbody has been assessed for all designated uses and found to be fully supporting of each, IDEM would assign each use to Category 1. The fact that there are no Category 1 waters is not a function of how IDEM categorizes its waters. Rather, it is due to the fact that very few waters have been assessed for all three designated uses. Category 1 is not applicable unless all uses are assessed.

As the commenter points out, there are errors in IDEM's Consolidated List. IDEM's review of its 303(d) list and Consolidated List with the Assessment Database from which the category information is drawn is an ongoing process. IDEM will review the Consolidated List for the streams in question to determine what if any corrections are necessary and will do the same for any additional inconsistencies the commenter shares with IDEM.

Comment: Category 3 is for waters for which IDEM has "[i]nsufficient data and information to determine if any designated use is attained." The description goes on to say that "[s]tates should schedule monitoring on a priority basis to obtain data and information necessary to classify these waters as Category 1, Category 2, Category 4, or Category 5." Yet the vast majority of water segments listed in the 305(b) spreadsheet are assigned to Category 3 for three uses—swimming, fishing and aquatic life. Frighteningly, most waters that have a designated public water supply use are also listed in Category 3 for that use. Given the vast number of water segments in this category and IDEM's increasingly limited resources for assessing water quality, the admonishment to prioritize these waters for assessment and assignment to other categories is fatuous. (SC)

IDEM Response: *The requirement to prioritize Category 3 waters for assessment and assignment to other categories comes from U.S. EPA 2006 Integrated Report guidance, which is available online at: http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/2006IRG_index.cfm. IDEM has explored the question of how to get to those waters not yet monitored. In 2013, IDEM completed an analysis of the resources needed to site specifically monitor every waterbody in the state for all designated uses and concluded that even if the estimated $75 million were available to collect the samples and landowners granted access to their properties, there would not be enough laboratory space or trained aquatic biologists in Indiana to collect and analyze the samples. For example, IDEM currently collects approximately 3,500 chemistry samples from Indiana waters each year. To monitor all waters using a basin rotation over a nine-year period, which would make the most efficient use of time and logistical funds, IDEM would have to*

collect 3000-4000 samples per month resulting in a minimum ten-fold increase in the number of samples going to Indiana laboratories for analysis.

Comment: The 303(d) list does not identify the waters that have had impairments removed due to successful implementation of a TMDL. For that information we need to refer to the Integrated Report, which has a section on "Successes in Water Quality Management" beginning on page 25. That section states that since 2007 IDEM has reported water quality improvements in nine twelve-digit watersheds and one eight-digit watershed impacting nearly 160 stream miles.

The next section describes one particular "success story," that of Jenkins Ditch, a 2.13-mile headwater tributary in the South Fork Wildcat Creek subwatershed. The section describes the development and implementation of a TMDL for *E. coli*, total suspended solids, nitrate-nitrite and impaired biotic community. It concludes that subsequent IDEM monitoring indicated that the implementation of non-point source BMPs had corrected the impairment and "IDEM removed the Jenkins Ditch segment from its list of impaired waters in 2012, the first time that it has moved a water with an Impaired Biotic Communities impairment from Category 4a to Category 2 due to an improvement in water quality." However, on line 2511 of the 2014 Consolidated List (Appendix F of the Integrated Report), Jenkins Ditch is still listed as 4A for impaired biotic communities and Category 3 for its recreational and fishable uses. We have to assume that this is the same Jenkins Ditch although its assessment unit identification number in the list is INB0738_T1001 while the Integrated Report gives its ID number as INB0742_T1001. We find no other entries for a Jenkins Ditch among the Wildcat Creek South Fork tributaries and no listing of a waterbody with the identification number given in the report.

Nor is this an isolated instance of inconsistency between the Consolidated List data and reports of TMDL "success stories." Table 5 of the Integrated Report lists 10 waterbodies that IDEM says it removed from the 303(d) list when the impairments were corrected, including Jenkins Ditch. The E.P.A has descriptions of several of these on its Section 319 Nonpoint Source Success Stories.[6] The summary for one such waterbody, Big Walnut Creek, says IDEM removed it from the 2010 303(d) list after the implementation of agricultural BMPs corrected its *E. coli* impairments. Yet the 2014 Consolidated Report lists several *E. coli* impairments for Big Walnut Creek. (See entries at 10445, 10452, 10527, 10530, 10535 and 10538.) Similarly the E.P.A website describes the correction of impaired biotic communities in Bull Run and West Creek in Lake County, but the Consolidated List puts Bull Run in Category 5A for aquatic life use, showing a nutrient impairment (entry 7346), and has a listing for West Creek showing no aquatic life use impairment but a 5A listing for impaired biotic communities (7351). (SC)

IDEM's Response: *U.S. EPA's categorization scheme allows IDEM to place waters with impairments successfully addressed by the measures recommended in a TMDL in Category 2 for the designated use in question, assuming there are no remaining impairments of that use. However, this does not provide a clear way to track improvements resulting from the implementation of a TMDL, which IDEM believes is important. U.S. EPA is working on upgrading its Assessment TMDL Tracking and Implementation System (ATTAINS) database to more accurately track these water quality improvements, which promises to provide states with the data needed to more accurately report and characterize such improvements. In the*

[6] http://water.epa.gov/polwaste/nps/success319/

meantime, IDEM will continue to report its successes in both the Integrated Report and any associated delistings in its 303(d) listing documentation and is working to resolve the inconsistencies.

Comment: The frequency of errors or confusing entries in the Consolidated List leads us to suspect that the list has become unmanageable. With 12,420 waterbody entries, each of which is placed in a category for at least three and sometimes four uses with 20 possible types of impairments, the list has become a repository of so much data that it may no longer serve a useful purpose. The listing of so many water segments, and the arcane identification numbering system with which IDEM identifies them, are much too complicated to be helpful for the general public. Much of the confusion may be the result of the revision in stream segment identification (the "Reach Index") that IDEM has worked on since 2008 to accommodate higher resolution maps in the National Hydrography Dataset. The amount of work this has entailed can be judged by the lengthy tables listing changes in stream segmentation. The Notice of Comment Period states that this work is now almost complete. With this chore behind it, we urge IDEM to find a way to simplify the process of reporting waterbody assessments so that both IDEM and the public can determine the condition of our waters and, hopefully, to track their gradual improvement with greater ease. (SC)

IDEM's Response: *IDEM is keenly interested in how it can make the information it provides with the 303(d) list more easily understood and more useful to the public. Including more visual representations of listing information in the form of maps and other types of graphics is important and IDEM will strive to do this for future 303(d) lists.*

Comment: In the listings of Category 4B impairments (Appendix H, 303(d) Attachment 2: Status of Category 4 Waters, pp. 2-73 to 2-75), the discussion of the impairments caused by the Picnic Wood Wastewater Treatment Plant (Attachment 2-75) appears to need to be updated. It says the impairments will remain in Category 4B "through the 2012 303(d) listing cycle to allow time for biological communities to recover and for IDEM to conduct the monitoring necessary to verify that their impairment no longer exists." The 305(b) spreadsheet lists these sections as Category 3 for all uses. If IDEM is conducting the necessary monitoring, it should know whether the impairments continue to exist or not. (SC)

IDEM Response: *IDEM has not yet conducted the monitoring required to determine if the biological communities in this waterbody have been restored.*

Comment: Beginning on page 2-17 of the TMDL Development Schedules (Appendix H, 303(d) Attachment 1) at line 8 and continuing to page 2-19, line 8, waters listed as being in the Great Lakes basin are identified as being located in Crawford, Clark, Dearborn, Jefferson, Pike, Ripley and Washington counties. These counties in the southern area of the state are not in the Great Lakes basin. At line 14 on page 2-19, the final entry of the Great Lakes basin waters is identified as being in Brown County, which also is not in that basin. We suspect that these obvious errors are the result of faulty manipulation of a spreadsheet that contained this information, which may be another indication that the amount of data IDEM is manipulating to compile the 305(b) and 303(d) lists has become unmanageable.

IDEM Response: *These errors were the result of how the data were sorted in Microsoft Excel and have been corrected.*

Comment: The Alliance is disappointed that IDEM still maintains 54 ug/L as the phosphorus standard to assess recreational use (aesthetics) in natural lakes and reservoirs. In its responses to the Alliance's comments regarding the 2012 Integrated Report, IDEM acknowledged that a 54 ug/L benchmark was not as strict as the Great Lakes Water Quality Protocol's phosphorus target for Lake Michigan of 7 ug/L but assured the public in 2012 that IDEM's draft criterion of 25 ug/L "is far more stringent" than the 54 ug/L benchmark[7]. However, Indiana has not yet implemented this lower benchmark and is still using the 54 ug/L level that is more than seven times the amount the U.S. has committed for Lake Michigan in the Protocol. Additionally, since Lake Michigan and its shoreline will not be the focus of an Integrated Report for nine more years due to Indiana's nine-year basin rotation method for assessments, adopting a more conservative phosphorus limit would be more beneficial to the ecosystem and communities along Lake Michigan. We recommend that Indiana apply the Great Lakes Water Quality Protocol's phosphorus target for Lake Michigan of 7 ug/L to evaluate recreational use (aesthetics) in Lake Michigan. (AGL)

IDEM Response: *IDEM developed its lakes assessment methodology for recreational use (aesthetics) in 2008 based on the results of a study conducted by Limnotech, Inc., which provided the benchmarks currently in use. Since then, IDEM has conducted additional studies to further refine these benchmarks, which resulted in the more stringent values proposed. IDEM has since adopted a different approach to addressing nutrient enrichment in Indiana lakes and reservoirs and, at this time, will not be moving forward with the nutrient criteria proposed. It is important to note that the values currently in use and those more stringent values proposed were based on studies that did not include Lake Michigan and are considered by IDEM to be representative of inland lakes and reservoirs only.*

Comment: The evaluation of phosphorus and Chla values as explained in the proposed 2014 CALM[8] ignore the particular importance of dissolved or soluble phosphorus. Given that dissolved reactive phosphorus is bioavailable to stimulate the growth of algae and that different courses of action impact total phosphorus and dissolved phosphorus disproportionately, levels of dissolved phosphorus should be measured alongside total phosphorus and used for impairment decisions. Soluble phosphorus is used as a measurement in the Indiana Trophic State Index for lakes, so the data is already being collected. The IDEM website recognizes Wawasee Area Conservancy Foundation's recommendation for soluble reactive phosphorus: a max of 0.005 mg/L[9]. That recommendation could serve as a starting point for setting an appropriate level for soluble reactive phosphorus. (AGL)

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[7] Indiana Department of Environmental Management, Addendum to Indiana Department of Environmental Management , *Office of Water Quality, 2012 303(d) List of Impaired Waters Submitted to U.S. Environmental Protection Agency on April 1* [hereinafter *2012 Appendix I*], *2012*, I-16.

[8] Indiana Department of Environmental Management, *Indiana Department of Environmental Management's 2014 Consolidated Assessment and Listing Methodology* [hereinafter *2014 CALM*], 45 (2014).

[9] Indiana Department of Environment Management, Water Quality Targets, http://www.in.gov/idem/nps/3484.htm.

IDEM Response: *IDEM will take your recommendation under advisement*

The Lake Wawasee Area conservancy Foundation's recommendation for SRP is provided on IDEM's Nonpoint Source Program website a[10]s a benchmark to help watershed groups develop targets for their watershed management plans. In comparison, developing a scientifically defensible assessment methodology for the purpose of implementing the federal Clean Water Act requires far more thorough analysis as the development of IDEM's current assessment methodology illustrates. IDEM considers its present methodology sufficient for determining recreational use support within the context of aesthetics in Indiana's inland lakes and reservoirs but will re-evaluate as we collect and analyze more data for numeric nutrient criteria.

Comment: IDEM must provide a more detailed evaluation of floating debris, including onshore litter, in order to improve the health of Lake Michigan beaches and waters. Nearshore waters and beaches strewn with dirty cigarette butts, plastic bags, bottles, cans, and the like, are not an inviting foreground for the natural beauty of the lakes. Indiana's Administrative Code calls for the water to "meet the minimum conditions of being free from … *floating debris,"* yet the stated assessment methodology for recreational use of lake waters does not include an evaluation of floating debris. To properly assess compliance with Indiana standards as required by the CWA, IDEM must assess impairment of Great Lakes' shoreline by floating debris. IDEM must evaluate debris data using clear criteria for deciding whether the standard has been attained. Indiana regularly stresses in its 2014 Integrated Report that it is following EPA guidelines, but IDEM ignores EPA's Great Lakes Beach Sanitary Survey (BSS) and recommendations. EPA's BSS, used to assess primary and secondary contact use at Great Lakes' beaches, provides a standardized format and method for the collection of data on beach conditions, including litter/debris. This standardized evaluation tool ensures all beaches are assessed accurately and uniformly. In their evaluation of litter/debris, the BSS measures the amount of litter/debris, both floating and onshore. Additionally, while Indiana evaluated only E. coli levels for recreational use purposes, the EPA recommends that "[b]acteria data should be examined alongside other data collected including weather, rainfall, algae, *debris*, wildlife, flow, and water quality."[11] The Alliance demonstrates how the Beach Sanitary Surveys can be used to collect debris data. Data collection and quality assurance methods used by the Alliance's Adopt-a-BeachTM volunteer survey are modeled on EPA's BSS methodology. Based on the Adopt-A-Beach™ data, Indiana should list the Lake Michigan shoreline as impaired due to floating debris. Beyond the BSS, IDEM could evaluate available data of the volume of floating debris collected in catch basins and in stormwater systems. Data on trash collected from stormwater runoff is readily available from smaller agencies in the area. For example, Indiana University Northwest collects information on both inorganic and organic debris. (AGL)

IDEM Response: *The approaches described by the Alliance for the Great Lakes for the development of an assessment methodology unique to the Lake Michigan shoreline merit IDEM's*

[10] 327 IAC 2-1.5-8(b)(1).

[11] U.S. Environmental Protection Agency, Great Lakes Beach Sanitary Survey User Manual, 6-11 (2008) (Emphasis added), *available at* http://water.epa.gov/type/oceb/beaches/upload/2008_05_29_beaches_sanitarysurvey_usermanual.pdf.

consideration, and IDEM agrees that such a methodology would likely improve IDEM's ability to better characterize the degree to which the shoreline supports recreational use. However, using these data would first require the development of a scientifically sound and defensible assessment methodology. As noted in IDEM's response to the previous comment, such an effort would be complex and resource intensive and must necessarily be balanced with other OWQ priorities. For the 2016 cycle, IDEM's priority with regard to assessment methodology development is to develop more robust methods for evaluating drinking water use support. The use of Beach Sanitary Surveys and other similar types of information remains on IDEM's candidate list of methodology issues to explore for future development.

Comment: The Alliance requests that IDEM identify and list Jeorse Park Beach as impaired due to excessive algae levels. According to the Indiana Administrative Code, "All surface waters within the Great Lakes system at all times and at all places…shall meet the minimum conditions of being free from … scum attributable to municipal, industrial, agricultural, and other land use practices."[12] The Code also prohibits discharges that are "in concentrations or combinations that will cause or contribute to the growth of aquatic plants or algae to such degree as to (i) create a nuisance; (ii) be unsightly; or (iii) otherwise impair the designated uses."[13] It is commonly known that algae is a problem at Jeorse Park beach.[14] Scientific studies of Jeorse Park have also identified algae as a problem at Jeorse Park beach.[15] The Alliance's Adopt-A-Beach™ volunteers continue to survey Indiana's Lake Michigan shoreline and have found high levels of algae along the nearshore waters of Jeorse Park Beach that are not reflected on Indiana's impaired waters list. 2013 Adopt-a-Beach™ data for Indiana's Lake Michigan shoreline is included with these comments for your review. (AGL)

IDEM Response: *Developing an assessment methodology for Lake Michigan beaches presents a unique problem as water quality is likely far different from that of the open waters of Lake Michigan. As noted before, IDEM does not consider the benchmarks currently in use for making recreational use support assessments within the context of aesthetics representative for Lake Michigan. IDEM does have information on average chlorophyll a concentrations for the different basins in Indiana, which could be used as an indicator of algal conditions. However, these were derived from data collected from flowing waters, not beaches.*

The example data provided by the Alliance for the Great Lakes represents a potentially valuable data set that IDEM could use to determine the degree to which Lake Michigan and its beaches support recreational use support within the context of aesthetics. However, as noted in IDEM's response to the previous comment, using these data for the purposes of making a designated use support assessment requires the development of a scientifically sound and defensible assessment methodology.

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[12] 327 IAC 2-1.5-8(b)(1) (emphasis added).
[13] 327 IAC 2-1.5-8(b)(1)
[14] See "Students pitch in to clean up Jeorse Park Beach," NWI Times (May 5, 2013)(" Often covered with trash and algae, many gulls are drawn to the beach, further impacting water quality.") online at: http://www.nwitimes.com/news/local/lake/east-chicago/students-pitch-in-to-clean-up-jeorse-parkbeach/article_70dc2ad7-37a9-59b9-8f16-db282b0107ce.html
[15] See Richard Whitman, "What Can Empirical Observations and Numerical Modeling Tell us About Beach Contamination?" ("Algae is an Issue at Jeorse Park") online at: http://www.glin.net/glba/pdf/2012conf/Whitman-USGS.pdf

While there are currently no plans to develop an assessment methodology specific to Lake Michigan beaches, IDEM would be very interested in working with the Alliance for the Great Lakes to obtain any data it has through the External Data Framework (EDF). Methodology development begins with data and a partnership with the Alliance through the EDF would allow IDEM to more easily evaluate the data the Alliance has to share for this purpose.

References Cited in IDEM's Responses

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Attachment 3

IDEM's Responses to Comments Received from U.S. EPA on Indiana's Draft 2014 303(d) List of Impaired Waters and the Consolidated Assessment and Listing Methodology Used for its Development

Indiana's 2014 IR/ 303(d) List and Assessment Methodology
U.S. Environmental Protection Agency's Comments

1. Page 50 of the IR narrative states that fish tissue data was collected from 1983 through 2008. Please clarify if that was the time frame for the data that IDEM use for making listing determinations related to fish tissue in the 2014 list.

IDEM Response: *Page 50 of the 2014 Integrated Report narrative discusses IDEM's ground water assessments, not its fish tissue assessments. There are not 50 pages in IDEM's 303(d) narrative (Appendix H) nor can IDEM find any such statement in it 2014 Consolidated Assessment and Listing Methodology (Appendix H, Attachment 1). Perhaps the following information will provide the clarification U.S. EPA is seeking with regard to IDEM's fish tissue assessments. If U.S. EPA is referring to the material presented on page 49 regarding public health and aquatic life concerns, this information was provided in the IR to report on that trends in fish tissue concentrations of PCB and mercury that IDEM has identified over time. The data used to determine these trends were collected between 1983 and 2008. Determining these trends for the purposes of Integrated Reporting employed a different analysis than IDEM's assessment of fish consumption use support, which as described in the CALM, relies on the most recent 12 years' worth of data.*

2. Appendix A, Table 1. The information provided regarding PWS designated use in Footnote 1 is not consistent with the information in the table. The table indicates that 384 river miles are designated while the footnote states 111. Also the table lists 35 miles of Lake Michigan shoreline while the footnote states 31. The final Table and/or footnote should be revised as appropriate to provide consistent river and Lake Michigan Shoreline miles.

IDEM Response: *IDEM will investigate this further to determine the correct value. IDEM is in the process of finalizing its high resolution reach index and plans to complete this work in 2015. Given this, any number IDEM provides now may yet change. Therefore, IDEM will make the necessary corrections to this table in its 2016 Integrated Report.*

3. Appendix A, Table 1. The table indicates a total 59 miles of Lake Michigan shoreline for Full Body Contact, Human Health and Wildlife and Warm Water Aquatic Life while the 2010 version of this table indicated a total of 67.12 miles following the application of the 1:24,000 NHD. The 2012 version of this table also indicated a total of 67 miles. The final Table should be revised to reflect the correct number of miles, or explain the difference from prior versions.

IDEM Response: *IDEM's response to U.S. EPA's second comment applies to this one.*

4. Appendix A, Table 8. Were there other data sets received from data solicitation besides those included in Table 8? If there were any data received from data solicitation (whether it was from 2010, 2012, or 2014) that was not considered for the 2014 report, please identify and explain why the data were not used in making the listing determinations.

IDEM Response: *The data sets shown in Table 8 are those that were received for the 2008 cycle. IDEM has yet to formally assess these data choosing instead to focus its limited staff resources on further development of the External Data Framework, which will streamline the process of soliciting, reviewing and assessing where possible, all external data submitted to IDEM going forward, this said, IDEM has every intention of evaluating the data sets identified in Table 8 and will do so as soon as possible.*

5. Appendix A, Table 9, page A-12. The summary of Drinking Water Use Support for Rivers and Streams is very comprehensive and includes all applicable contaminants. These same support parameters should also apply to lakes. Currently lakes are only listed as impaired for Drinking Water Use Support based on a water system's application for use of an algaecide to prevent taste and odor problems. EPA suggests that IDEM develop a more robust drinking water assessment methodology pertaining to lakes and reservoirs that focuses on a subset of parameters that can be used to reasonably assure that the assessment is protective of drinking water use. The assessment methodology for drinking water use support for lakes and reservoirs should be broadened to include pathogens, pesticides, harmful

algal blooms **(**HABs), Dibutyl phthalate (DBP) precursors and other contaminants that pose a risk to public health and/or increase public water system treatment costs.

IDEM Response: *It is IDEM's goal to develop a more robust drinking water assessment methodology, and IDEM is exploring methods employed by other states as time allows. Water quality assessments are a data-driven process. Therefore, the first step in developing an assessment methodology is to determine what data are needed for the decision-making process and what data are readily available. With the exception of Lake Michigan, IDEM's current targeted monitoring programs do not include sampling at surface water intakes. In order to obtain sufficient data for drinking water use support assessment, IDEM would have to develop a targeted monitoring program specifically for drinking water facilities and/or rely on external data. In order to do this, IDEM must determine what data are readily available from external parties and consider expanding its monitoring effort (if possible) and must have a defensible assessment methodology in place to evaluate the data. Regarding the latter, the types and quantity of data to be used in assessments would need to be established and the number of exceedances required to trigger impairment would have to be determined.*

6. Appendix H, Attachment 1, Table 6. We recommend that, as part of the minimum data requirements for CWA 305(b) assessments, the Table clarifies the timeframe used for determining up to what point data can be considered for assessments (e.g. the most recent 12 years' worth of data; and data are not expected to be from consecutive years). The timeframe may vary depending on the type of assessment.

   IDEM Response: *IDEM believes this information to be useful to the public and will revise its Consolidated Assessment and Listing Methodology (CALM) (Attachment 1) accordingly.*

7. Appendix H, Attachment 1, Table 7. Under Benthic aquatic Macroinvertabe Index of Biotic Integrity (mIBI), "Fully Supporting" should be mIBI $\geq$ 36 instead of mIBI >36.
   IDEM Response: *IDEM will make this correction to its CALM (Attachment 1).*

8. Appendix H, Page 30. IDEM states that it defers to ORSANCO's assessments based on biological data and ORSANCO's approach to evaluating water chemistry data for Ohio River listings. ORSANCO uses a weight-of-evidence approach for its assessment of water quality standards attainment, whereby biological data (fish data) override water chemistry data in determining impairment. EPA's guidance does not support this approach. In addition, ORSANCO is currently only using a single biological assemblage (fish biotic index) and the attainment threshold chosen by ORSANCO seems to merit some concern for being too low. Because of this, the effects of chemical exceedances may not be apparent because the approach does not measure impacts on other biological groups like macroinvertebrates. Furthermore, ORSANCO aggregates the data for listing determinations by pool rather than looking at data for each site to make the determination. The data should be considered on a site-by-site basis and not aggregated to reflect local impacts.
   However, IDEM's response to EPA comments on Indiana's 2012 IR/303(d) list included in the 2012 IR Appendix I: Addendum to Indiana's 303(d) List indicated that IDEM reevaluated its methods of applying temperature and dissolved oxygen results from the in-situ monitors located on the dams along the Ohio River, most of which are located at the lower end of a given pool on the upstream side of the dam. IDEM determined that given the size and volume of each pool, extrapolating chemical and physical results over distances of 25-95 miles was not representative of water quality conditions in the Ohio River. To address this issue, IDEM limited extrapolation of data collected from ORSANCO's in-situ meters to the reaches on which they are located, which resulted in extrapolations over distances of approximately two to six miles.

   For the CALM, IDEM should be making its own assessment determinations on the available data, by applying the biological data independently from the water chemistry data to make attainment decisions, instead of deferring to ORSANCO's assessments. In addition, IDEM has its own assessment unit (AU) segmentation for the Ohio River, and should be using that segmentation in its evaluation of the data applicable to each AU and to determine whether any water quality standard is being exceeded.

***IDEM Response**: IDEM believes ORSANCO's assessment methodology with regard to the Ohio River's ability to support aquatic life use is defensible and appropriate. IDEM actively participates in ORSANCO"s 305(b) quality assessment processes. Every two years, ORSANCO prepares a description of the proposed methodology for review by the 305(b) workgroup, which is made up of state agency personnel in each member state and one or more U.S. EPA representatives responsible for reviewing state reports. When the 305(b) workgroup reaches agreement on the methodology, it is submitted to ORSANCO"s technical committee for review and approval. IDEM has technical staff that serves on both the 305(b) Work Group and the Technical Committee. IDEM participated and supports ORSANCO"s assessment methodologies for the 2012 cycle including its use of a weight of evidence approach.*

Biological assessments provide a direct measure of the health of the aquatic ecosystem. Such assessments are able to detect impacts that may be occurring as a result of non-chemical stressors such as temperature, low dissolved oxygen levels and/or combined impacts of chemical stressors that may be occurring at concentrations not exceeding any water quality standard. ORSANCO"s fish community assessments of the Ohio River use the modified Ohio River Fish Index (mORFIn), which was developed based on the nationally used Index of Biotic Integrity (IBI) designed to assess smaller streams. The mORFIn has been customized to assess the Ohio River, with expected values developed for the different habitats found in this large river system. The mORFIn combines various attributes of the fish community to give a score to the river based on its biology. The total score is compared to an expected score, which varies depending on the habitat type and location.

When monitoring the fish community, ORSANCO randomly selects fifteen sites in each pool, which when combined into one score, provides a robust and representative result for the entire pool. The most recent mORFin scores for the pools noted above all ranged from good to very good. IDEM maintains that these results provide a far more direct and accurate measure of the degree to which the Ohio River supports aquatic life use than dissolved oxygen and temperature data from monitors located on the upstream end of five dams can independently provide.

IDEM believes the decision made by ORSANCO's Technical Committee to use the weight of evidence approach in its assessments of dissolved oxygen and temperature is scientifically defensible. Given this, IDEM maintains that its application of the resulting assessments to the reaches of the Ohio River that border Indiana in its Integrated Report and 303(d) listing processes is appropriate and has carefully considered the implications of its decision.

With regard to ORSANCO's methods for aggregating data, IDEM agrees that for biological assessments, a pool is indeed synonymous with a reach as defined by U.S. EPA. However, it is IDEM"s prerogative to define waterbody reaches for the purposes of its assessment and listing processes. In 2010, IDEM resegmented the Ohio River that borders Indiana in order to more accurately apply ORSANCO's assessments. In applying ORSANCO's assessments, IDEM does not aggregate chemistry data by pool because they are collected at targeted locations and cannot be shown to be statistically representative of the entire pool in which they were collected. In contrast, the fish community sampling locations are randomly selected allowing confident aggregation of the results from each site into one assessment. Scores are provided for each location and then aggregated into one result for the entire pool. IDEM concurs with this approach.

9. According to IDEM's response to EPA comments on Indiana's 2012 IR/303(d) list included in the 2012 IR Appendix I: Addendum to Indiana's 303(d) List, the State indicated that based on the dissolved oxygen (DO) data assessed for the 2012 cycle, there were exceedances at two of the eight monitoring stations located along the stretch of the Ohio River bordering Indiana. The stations with exceedances are located on the following AU reaches: **INH2_01** located in the Markland Pool, and **INH5_15** located in the Cannelton Pool. In addition, based on the temperature data assessed for the 2012 cycle, there were exceedances at four of the eight monitoring stations located along the stretch of the Ohio River bordering Indiana. The stations with exceedances are located on the following AU reaches: **INH3_12** located in the McAlpine Pool, **INH5_15** located in the Cannelton Pool, **INH6_10** located in the Newburgh Pool, and **INH8_12** located in the John T. Myers Pool. The above AU reaches were not listed for the corresponding DO and temperature impairments on either the 2012 or the 2014 303(d) lists. Based on the available information, it appears these impairments should be included on the 2014 list.

***IDEM Response**: ORSANCO applies a weight of evidence approach in its aquatic life use support assessments. As indicated in IDEM's response to the previous comment, IDEM believes this approach to be appropriate and defensible and as such, decided not to list the reaches noted in U.S. EPA's comment above for dissolved oxygen or temperature on its 2012 303(d) list. ORSANCO's 2012 assessments were based on data collected from 2007-2011. Since then, ORSANCO has finalized its 2014 assessments and has found no stations bordering Indiana where temperature or dissolved oxygen (DO) results exceed applicable criteria in more than 10% of the all results from 2009-2013. IDEM continues to support ORSANCO's use of a weight of evidence approach in its aquatic life use assessments. However, in this case, even if independent applicability had been used, the most recent data do not support listing these reaches for dissolved oxygen or temperature.*

10. The stretch of the Ohio River bordering Indiana contains drinking water intakes (public water supply designation). However, IDEM's CALM doesn't include any methods for applying ORSANCO's drinking water data for the purposes of Integrated Reporting, which are summarized in Appendix H, Table 8 (Water quality assessment criteria for determining designated use support for the Ohio River). IDEM needs to establish a drinking water use assessment methodology for the Ohio River.

***IDEM Response:** Although IDEM's CALM does not articulate it, IDEM defers to ORSANCO for its drinking water assessments. The following is an excerpt from ORSANCO's draft "Biennial Assessment of Ohio River Water Quality Assessments, 2009-2013":*

> *"The bimonthly and clean metals programs are comprised of 15 sampling stations along the Ohio River. Grab samples are collected from sites once every other month. Parameters monitored by ORSANCO for which there are in-stream water quality criteria for public water supply protection include arsenic, barium, silver, copper, nickel, selenium, thallium, total mercury, zinc, cyanide, chloride, fluoride, nitrates, nitrites, phenolics, and sulfates. Data included in this report were collected from January 2009 to Oct. 2013. Bacteriological surveys are important to ensure that the fecal coliform criterion for drinking water—2,000 colonies/100 ml as a monthly geometric mean—is not exceeded. From 2009 through 2013, bacteria data were collected during the contact recreation season (May through October) in Pittsburgh, Wheeling, Huntington, Cincinnati, Louisville, and Evansville. In addition, the Commission mailed surveys to all Ohio River water utilities, requesting information about their source water quality. ORSANCO received responses from 13 utilities which represent a forty percent response rate. Questionnaires asked utilities if there were frequent intake closures due to spills, whether violations of finished drinking water maximum contaminant levels (MCLs) occurred due to source water quality, or whether "non-routine" or extraordinary treatment due to source water quality was necessary to meet finished water MCLs. In addition to the questionnaires, MCL violations were downloaded from EPA's website the Safe Drinking Water Information System (SDWIS). Assessment of these data is as follows:*
>
> > *Fully Supporting*
> > *• Pollutant criteria are exceeded in 10 percent or less of the samples collected.*
> >
> > *Partially Supporting-Impaired*
> > *• One or more pollutants exceed the criteria in 11 to 25 percent of the samples collected, and there is a corresponding finished drinking water violation.*
> >
> > *Not Supporting-Impaired*
> > *• One or more pollutants exceed the criteria in greater than 25 percent of samples collected, and there is a corresponding finished drinking water violation."*

The only exception IDEM takes to ORSANCO's methods is in how IDEM lists drinking water impairments on its 303(d) list. Any reach identified by ORSANCO as partially supporting or not supporting would be included on

IDEM's 303(d) list (Category 5A). ORSANCO's 2012 and 2014 cycle assessments identified no drinking water use impairments.

11. EPA disagrees with IDEM's assessment methodology with regard to metal toxicants. As discussed in EPA's May 8, 2013 decision document for Indiana's 2010 303(d) list partial approval/ partial disapproval, EPA determined that it is appropriate to use total metals data and derived criteria for WQS attainment status determinations and 303(d) listing decisions for Indiana waters. On May 14, 2014, EPA took final action on Indiana's 2010 303(d) list, which added a series of waterbodies and associated metal pollutants to the State's 2010 303(d) list. EPA recognizes that the timing of our final action on the State's 2010 list came very close to IDEM's scheduled public notice for its draft 2014 list (April 30, 2014). We note that IDEM's 2014 draft 303(d) list did not include the metals impaired waters that EPA added to the State's 2010 list (see table below). We request that IDEM add these waters to its 2014 list based on the readily available data and information that EPA presented in its final May 14, 2014 action that added these waters to the 2010 list. In the event IDEM chooses to not include these waters on its 2014 list, we request that it demonstrate good cause for not including these on the list per EPA's regulations at 40 CFR 130.7(b)(iv).

2010 AU ID	AU NAME	CAUSE OF IMPAIRMENT	HUC	AU SIZE	UNIT	2012 New AU ID	2014 New AU ID
INB11G4_T1003	SULPHUR CREEK (HEADWATERS)	ALUMINUM	51201111505	5.72	Miles	INB11F5_T1003	
INB11G4_T1003	SULPHUR CREEK (HEADWATERS)	IRON	51201111505	5.72	Miles	INB11F5_T1003	
INB11G4_T1003	SULPHER CREEK	ZINC	51201111505	5.72	Miles	INB11F5_T1003	
INB11G4_T1004	SULPHUR CREEK	ALUMINUM	51201111505	9.05	Miles	INB11F5_T1005	
INB11G4_T1004	SULPHUR CREEK	COPPER	51201111505	9.05	Miles	INB11F5_T1005	
INB11G4_T1004	SULPHUR CREEK	IRON	51201111505	9.05	Miles	INB11F5_T1005	
INB11G4_T1004	SULPHUR CREEK	ZINC	51201111505	9.05	Miles	INB11F5_T1005	
INB11G4_T1005	SULPHUR CREEK	ALUMINUM	51201111505	3.79	Miles	INB11F5_T1006	
INB11G6_02	BIG BRANCH	ALUMINUM	51201111504	1.28	Miles		
INB11G6_03	MUD CREEK	ALUMINUM	51201111504	7.1	Miles		
INB11G6_03	MUD CREEK	IRON	51201111504	7.1	Miles		
INB11G6_04	MUD CREEK	ALUMINUM	51201111504	2.78	Miles		
INB11G6_04	MUD CREEK	IRON	51201111504	2.78	Miles		
INB11G9_01	BUTTERMILK CREEK	ALUMINUM	51201111507	5.94	Miles	INB11F7_01 INB11F7_01B	
ING0322_T1012	BLOOMINGPORT CREEK	ALUMINUM	50800030202	4.29	Miles		
ING0324_01	GREENS FORK	IRON	50800030204		Miles		
ING0335_01	NOLANDS FORK	IRON	50800030305	2.22	Miles		
ING0348_02	WHITEWATER RIVER	IRON	50800030408	4.91	Miles		
ING0365_01	WHITEWATER RIVER	ALUMINUM	50800030605	15.35	Miles		
ING0365_02	WHITEWATER CANAL	ALUMINUM	50800030605	8.31	Miles		
ING0365_T1002	SNAIL CREEK	ALUMINUM	50800030605	7.18	Miles		
ING0365_T1003	MCCARTYS RUN	ALUMINUM	50800030605	7.4	Miles		
ING0365_T1004	BUTLERS RUN	ALUMINUM	50800030605	6.65	Miles		
ING0365_T1008	YELLOW BANK CREEK	ALUMINUM	50800030605	16.56	Miles		
ING0379_01	WHITEWATER RIVER, EAST FORK	IRON	50800030709	4.56	Miles		
ING037B_01	WHITEWATER RIVER, EAST FORK	ALUMINUM	50800030711	2.73	Miles		

2010 AU ID	AU NAME	CAUSE OF IMPAIRMENT	HUC	AU SIZE	UNIT	2012 New AU ID	2014 New AU ID
ING037E_05	HANNA CREEK	ALUMINUM	50800030714	35.28	Miles		
ING037E_06	HANNA CREEK	ALUMINUM	50800030714	13.89	Miles		
ING037E_T1001	DUBOIS CREEK	ALUMINUM	50800030714	11.43	Miles		
ING037H_T1001	WHITEWATER RIVER, EAST FORK - UNNAMED TRIBUTARY	ALUMINUM	50800030717	1.03	Miles		
ING037H_T1003	WHITEWATER RIVER, EAST FORK - UNNAMED TRIBUTARY	ALUMINUM	50800030717	1.69	Miles		
ING037H_T1006	WHITEWATER RIVER, EAST FORK - UNNAMED TRIBUTARY	ALUMINUM	50800030717	2.84	Miles		
ING037H_T1007	WHITEWATER RIVER, EAST FORK - UNNAMED TRIBUTARY	ALUMINUM	50800030717	0.82	Miles		
ING037H_T1010	WOLF CREEK	ALUMINUM	50800030717	9.74	Miles		
ING037H_T1011	WHITEWATER RIVER, EAST FORK - UNNAMED TRIBUTARY	ALUMINUM	50800030717	6.56	Miles		
ING037H_T1018	WHITEWATER RIVER, EAST FORK - UNNAMED TRIBUTARY	ALUMINUM	50800030717	2.56	Miles		
ING0383_T1005	POSSUM HOLLOW	IRON	50800030803	9.07	Miles		
ING0384_01	WHITEWATER RIVER	ALUMINUM	50800030804	11.05	Miles		
ING0384_T1004	GOBLES CREEK	ALUMINUM	50800030804	14.29	Miles		
ING0385_01	WHITEWATER RIVER	ALUMINUM	50800030805	11.46	Miles		
ING0385_01	WHITEWATER RIVER	IRON	50800030805	11.46	Miles		
INP0924_T1003	PATOKA RIVER	ALUMINUM	51202090402	7.92	Miles		INP0942_02
INP0925_00	POISON CREEK-BAUER CREEK	ALUMINUM	51202090403	14.81	Miles		INP0943_T1001 INP0943_T1002
INP0926_T1004	PATOKA RIVER-LOND DITCH	ALUMINUM	51202090403	13.13	Miles		INP0943_01
INP0928_T1005	PATOKA RIVER	ALUMINUM	51202090404	12.06	Miles		INP0944_01 INP0944_02
INP0933_00	HALL CREEK	ALUMINUM	51202090201	5.26	Miles		INP0921_03
INP0936_00	STRAIGHT RIVER	ALUMINUM	51202090202	6.12	Miles		INP0922_01 INP0922_T1004
INP0942_00	HUNLEY CREEK-HALO RUN/GREEN CREEK	ALUMINUM	51202090301	14.75	Miles		INP0931_01 INP0931_T1002 INP0931_T1003
INP0947_T1007	PATOKA RIVER	ALUMINUM	51202090406	3.88	Miles		INP0946_02
INP0947_T1007	PATOKA RIVER	LEAD	51202090406	3.88	Miles		INP0946_02
INP0948_00	PATOKA RIVER-CROOKED/ALTAR CREEKS	ALUMINUM	51202090406	13.01	Miles		INP0946_T1001 INP0946_T1002
INP0948_T1008	PATOKA RIVER	ALUMINUM	51202090406	11.5	Miles		INP0946_03
INP0951_00	FLAT CREEK HEADWATERS	ALUMINUM	51202090501	11.46	Miles		INP0951_01

2010 AU ID	AU NAME	CAUSE OF IMPAIRMENT	HUC	AU SIZE	UNIT	2012 New AU ID	2014 New AU ID
INP0962_00	PATOKA RIVER-ROCK CREEK TRIBUTARYS	ALUMINUM	51202090602	8.7	Miles		INP0962_T1005
INP0965_T1012	PATOKA RIVER	ALUMINUM	51202090603	5.14	Miles		INP0963_02 INP0963_03
INP0968_T1014	PATOKA RIVER	ALUMINUM	51202090604	3.17	Miles		INP0964_02
INP0969_T1015	PATOKA RIVER	LEAD	51202090605	1.33	Miles		INP0965_01
INP0971_T1021	SOUTH FORK PATOKA RIVER	ALUMINUM	51202090701	4.7	Miles		INP0971_01
INP0973_T1023	SOUTH FORK PATOKA RIVER	ALUMINUM	51202090702	2.17	Miles		INP0972_01
INP0981_00	ROBINSON/BIG CREEKS TRIBUTARYS	ALUMINUM	51202090802	28.43	Miles		INP0982_T1001 INP0982_T1004
INP0982_00	EAST FORK KEG CREEK	ALUMINUM	51202090801	6.13	Miles		INP0981_01
INP0987_T1019	PATOKA RIVER	ALUMINUM	51202090806	3.26	Miles		INP0986_03
INW014A_T1019	WHITE RIVER – PERKINSVILLE	LEAD	51202010310	8.67	Miles	INW013A_02	
INW0181_00	COX DITCH - CHRISTY/KIGIN DITCHES	ALUMINUM	51202010602	19.72	Miles	INW0162_01	
INW0187_00	CICERO CREEK-WEASEL CREEK	ZINC	51202010606	17.02	Miles	INW0166_01 INW0166_T1001 INW0166_T1002	
INW0195_M1054	WHITE RIVER - HAVERSTICK CREEK/ HOWLAND DITCH TRIBUTARYS	ALUMINUM	51202011006	4.41	Miles	INW01A6_01	
INW01AC_T1046	FALL CREEK	ALUMINUM	51202010808	1.41	Miles	INW0188_03	
INW01AC_T1046	FALL CREEK	LEAD	51202010808	1.41	Miles	INW0188_03	
INW01C7_00	LITTLE EAGLE BRANCH - WOODRUFF BRANCH	ALUMINUM	51202011104	15	Miles	INW01B4_02 INW01B4_T1001	
INW01D2_M1059	WHITE RIVER	ALUMINUM	51202011201	2.55	Miles	INW01C1_01	
INW01E8_T1121	NORTH PRONG STOTTS CREEK	ALUMINUM	51202011405	2.71	Miles	INW01E5_T1004	
INW01ED_M1082	WHITE RIVER - HENDERSON BRIDGE	ALUMINUM	51202011407	3.9	Miles	INW01E7_03	
INW01G1_M1092	WHITE RIVER	ALUMINUM	51202011503	3.93	Miles	INW01F3_01	
INW01H7_T1103	INDIAN CREEK	ALUMINUM	51202011603	4.73	Miles	INW01G3_02	
INW0221_M1009	WHITE RIVER	ALUMINUM	51202020202	5.96	Miles		INW0222_01
INW0223_T1018	MCCORMICKS CREEK	ALUMINUM	51202020203	7.08	Miles		INW0223_T1003
INW0224_M1011	WHITE RIVER	LEAD	51202020205	7.17	Miles		INW0225_01
INW0259_M1032	WHITE RIVER	ALUMINUM	51202020506	8.64	Miles		INW0256_01
INW0272_M1036	WHITE RIVER - EDWARDSPORT TO INDIAN CREEK	LEAD	51202020803	8.07	Miles		INW0283_02
INW0275_M1037	WHITE RIVER – WHEATLAND	ALUMINUM	51202020804	9.52	Miles		INW0284_01
INW0284_00	FLAT CREEK AND OTHER TRIBUTARYS	ALUMINUM	51202020701	9.26	Miles		INW0271_02

2010 AU ID	AU NAME	CAUSE OF IMPAIRMENT	HUC	AU SIZE	UNIT	2012 New AU ID	2014 New AU ID
							INW0271_P1001 INW0271_T1003
INW0293_00	VEALE CREEK – LOWER	ALUMINUM	51202020902	9.35	Miles		INW0292_01
INW0297_M1040	WHITE RIVER	ALUMINUM	51202020907	7.01	Miles		INW0297_01 INW0297_02
INW02A3_M1052	WHITE RIVER	ALUMINUM	51202021003	18.02	Miles		INW02A1_01 INW02A3_01
INW02AC_M1056	WHITE RIVER	ALUMINUM	51202021007	18.99	Miles		INW02A7_01
INW0342_T1007	BIG WALNUT CREEK	ZINC	51202030405	4.41	Miles		
INW0368_00	LAKE DITCH-HEADWATERS	ALUMINUM	51202030505	10.12	Miles		INW0355_01 INW0355_T1001
INW036C_00	MILL CREEK-VERMILLION/HIGGENS BRANCHES	ALUMINUM	51202030509	14.24	Miles		INW0359_01 INW0359_T1001 INW0359_T1003 INW0359_T1004
INW036C_00	MILL CREEK-VERMILLION/HIGGENS BRANCHES	ZINC	51202030509	14.24	Miles		INW0359_01 INW0359_T1001 INW0359_T1003 INW0359_T1004
INW0383_00	EEL RIVER-TURKEY CREEK	ZINC	51202030706	17.55	Miles		INW0376_02 INW0376_T1002
INW0384_00	BIRCH CREEK-LITTLE BIRCH CREEK	ALUMINUM	51202030601	9.93	Miles		INW0361_01 INW0361_T1001
INW0394_T1016	EEL RIVER	ALUMINUM	51202030805	2.79	Miles		
INW0395_T1019	CONNELLY DITCH-HEADWATERS	ALUMINUM	51202030804	7.51	Miles		INW0384_01
INW039D_T1025	EEL RIVER	LEAD	51202030811	3.12	Miles		INW038B_01
INW0455_T1020	BIG BLUE RIVER	IRON	51202040903	8.6	Miles		INW0487_01
INW0465_T1032	SUGAR CREEK SMITH-JOHNSON DITCH	ALUMINUM	51202040405	8.84	Miles		INW0445_02
INW0498_T1038	SUGAR CREEK	IRON	51202040903	5.12	Miles		INW0475_01
INW0521_T1004	FLATROCK RIVER-GRAVEL PITS	IRON	51202050402	2.27	Miles		
INW0526_T1007	FLATROCK RIVER	ALUMINUM	51202050403	7.34	Miles		INW0543_01
INW0552_T1013	FLATROCK RIVER - WILLOW PARK	IRON	51202050601	8.5	Miles		
INW0561_M1015	EAST FORK WHITE R-COLUMBUS	IRON	51202050606	1.98	Miles		INW0566_03
INW0615_00	CLIFTY CREEK	ALUMINUM	51202060103	5.81	Miles		INW0613_02
INW063K_T1011	SAND CREEK	IRON	51202060310	4.24	Miles		INW063A_02
INW0643_M1016	EAST FORK WHITE RIVER	ALUMINUM	51202060502	8.08	Miles		
INW0643_M1016	EAST FORK WHITE RIVER	IRON	51202060502	8.08	Miles		

2010 AU ID	AU NAME	CAUSE OF IMPAIRMENT	HUC	AU SIZE	UNIT	2012 New AU ID	2014 New AU ID
INW0643_M1016	EAST FORK WHITE RIVER	LEAD	51202060502	8.08	Miles		
INW0654_00	EAST FORK WHITE CREEK-UPPER	ALUMINUM	51202060401	8.58	Miles		INW0641_01 INW0641_02 INW0641_T1002
INW0665_M1021	EAST FORK WHITE RIVER	ALUMINUM	51202060603	6.81	Miles		INW0663_01
INW0721_00	GRAHAM CREEK-HEADWATERS	ALUMINUM	51202070201	7.09	Miles		INW0721_01
INW0722_00	NORTH FORK GRAHAM CREEK	ALUMINUM	51202070201	4.77	Miles		INW0721_T1001
INW0723_00	GRAHAM CREEK-CAMPFIRE CREEK	ALUMINUM	51202070203	19.87	Miles		INW0723_01 INW0723_T1001 INW0723_T1002
INW0724_00	LITTLE GRAHAM CREEK-HEADWATERS	ALUMINUM	51202070202	5.87	Miles		INW0722_01
INW0725_00	LITTLE GRAHAM-HORSE & POPLAR BRANCH	ALUMINUM	51202070202	15.22	Miles		INW0722_02
INW0755_00	NORTH FORK-SUGAR/LEATHERWOOD CREEK	ALUMINUM	51202070402	14.19	Miles		INW0742_T1003 INW0742_T1004
INW0757_00	BRUSH CREEK (JENNINGS)	ALUMINUM	51202070403	9.77	Miles		INW0743_P1001 INW0743_T1002
INW0761_00	OTTER CREEK-LONG BRANCH	ALUMINUM	51202070301	12.81	Miles		INW0731_01 INW0731_T1001
INW0763_00	OTTER CREEK-FALLING TIMBERS BRANCH	ALUMINUM	51202070302	10.64	Miles		INW0732_01 INW0732_02 INW0732_T1001
INW0771_00	VERNON FORK-CROSLEY LAKE	ALUMINUM	51202070701	9.21	Miles		INW0771_01
INW0771_00	VERNON FORK-CROSLEY LAKE	IRON	51202070701	9.21	Miles		INW0771_01
INW0771_00	VERNON FORK-CROSLEY LAKE	LEAD	51202070701	9.21	Miles		INW0771_01
INW0776_00	VERNON FORK-SIXMILE CREEK	ALUMINUM	51202070702	13.33	Miles		INW0772_01 INW0772_02 INW0772_T1002 INW0775_02
INW0781_00	MUTTON CREEK (UPSTREAM OF LITTLE MUTTON CREEK)	ALUMINUM	51202070704	6.48	Miles		INW0774_01
INW0782_00	MUTTON CREEK-LOWER	ALUMINUM	51202070704	8.14	Miles		INW0774_02 INW0774_T1003
INW0783_00	STORM CREEK-UPPER	ALUMINUM	51202070703	8.53	Miles		INW0773_01
INW0796_T1003	MUSCATATCUK RIVER (DOWNSTREAM OF VERNON FORK)	ALUMINUM	51202070902	11.98	Miles		INW0792_01 INW0792_03
INW0796_T1003	MUSCATATCUK RIVER (DOWNSTREAM OF VERNON FORK)	LEAD	51202070902	11.98	Miles		INW0792_01 INW0792_03
INW07B7_M1005	MUSCATATUCK RIVER	ALUMINUM	51202070905	5.43	Miles		INW0795_02

2010 AU ID	AU NAME	CAUSE OF IMPAIRMENT	HUC	AU SIZE	UNIT	2012 New AU ID	2014 New AU ID
INW0822_M1003	EAST FORK WHITE R - TUNNELTON	ALUMINUM	51202080302	14.86	Miles		INW0832_01 INW0832_02 INW0832_T1002 INW0834_01
INW0845_M1053	EAST FORK WHITE RIVER (ABOVE BEDFORD WATER INTAKE)	IRON	51202081003	1.2	Miles		INW08A3_01
INW08A2_M1008	EAST FORK WHITE RIVER	IRON	51202081005	11.87	Miles		INW08A5_01 INW08A6_01
INW08A3_M1058	EAST FORK WHITE RIVER	ALUMINUM	51202081006	10	Miles		INW08A6_01
INW08B4_00	INDIAN CREEK-TOWN BRANCH	ALUMINUM	51202080903	15.33	Miles		INW0893_01 INW0893_T1001 INW0893_T1002
INW08BA_00	INDIAN CREEK	IRON	51202080906	12.99	Miles		INW0896_02 INW08E4_T1001
INW08GA_T1035	LOST RIVER	ALUMINUM	51202081306	8.52	Miles		INW08D6_01
INW08GC_T1034	LOST RIVER	ALUMINUM	51202081307	7.75	Miles		INW08D7_01
INW08GF_T1032	LOST RIVER	IRON	51202081308	2.24	Miles		INW08D8_01
INW08H1_M1015	EAST FORK WHITE RIVER	ALUMINUM	51202081502	9.3	Miles		INW08F2_01
INW08H7_M1070	EAST FORK WHITE RIVER	ALUMINUM	5120208170070	3.9	Miles		INW08F8_01
INW08H9_M1055	EAST FORK WHITE RIVER	IRON	51202081509	4.3	Miles		INW08F9_01

IDEM Response: *IDEM maintains that it has already provided U.S, EPA good cause for not adding the waters shown in the table above to its 303(d) list. U.S. EPA and the public may review the material IDEM has provided to U.S. EPA in support of this position online at: http://www.in.gov/idem/nps/3889.htm.*

12. The table below includes a series of AU IDs that were identified as resegmented in Attachment 4 Table of IR2014_Appendix_H_303dNOC, but these AU IDs were not found in the provided segmentation tracking file. State needs to provide the corresponding segmentation tracking info that identifies the new AU IDs that are expected to be listed.

WATERBODY AU ID	WATERBODY AU NAME	CAUSE OF IMPAIRMENT	HUC	COUNTY	SEGSIZE	UNIT
INA0466_T1022	ST. MARYS RIVER	NUTRIENTS	4100004060060	ALLEN	0.44	Miles
INA0466_T1022	ST. MARYS RIVER	PCBs in FISH TISSUE	4100004060060	ALLEN	0.44	Miles
INB0155_T1013	EAST PRONG (HEADWATER) - UNNAMED TRIBUTARY	IMPAIRED BIOTIC COMMUNITIES	5120101050050	JAY	1.00	Miles
INB0156_T1001	LIMBERLOST CREEK-UNNAMED TRIBUTARY	IMPAIRED BIOTIC COMMUNITIES	5120101050060	JAY	1.00	Miles
INB0156_T1006	OAKLEY DITCH	IMPAIRED BIOTIC COMMUNITIES	5120101050060	JAY	1.00	Miles
INB0424_01	BLUE RIVER (DOWNSTREAM OF COLUMBIA CITY)	E. COLI	5120104020040	WHITLEY		Miles
INB0432_00	STONY CREEK (EAST OF RABER ROAD)	E. COLI	5120104030020	WHITLEY	13.95	Miles

WATERBODY AU ID	WATERBODY AU NAME	CAUSE OF IMPAIRMENT	HUC	COUNTY	SEGSIZE	UNIT
INB0432_01	STONY CREEK (WEST OF RABER ROAD)	E. COLI	5120104030020	WHITLEY	0.00	Miles
INB0432_01	STONY CREEK (WEST OF RABER ROAD)	IMPAIRED BIOTIC COMMUNITIES	5120104030020	WHITLEY	0.00	Miles
INB0432_02	EEL RIVER - UNNAMED TRIBUTARY	E. COLI	5120104030020	WHITLEY	0.00	Miles
INB0459_00	PAW PAW CREEK - OREN DITCH	E. COLI	5120104050090	MIAMI	9.36	Miles
INB0471_T1004	UNNAMED TRIBUTARY	IMPAIRED BIOTIC COMMUNITIES	5120104070010	MIAMI	1.31	Miles
INB0618_T1003	TIPPECANOE RIVER (DOWNSTREAM OF TIPPECANOE LAKE)	PCBs in FISH TISSUE	5120106010070	KOSCIUSKO	0.27	Miles
INB0635_T1011	TIPPECANOE RIVER	PCBs in FISH TISSUE	5120106030050	KOSCIUSKO	2.76	Miles
INB0635_T1040	TIPPECANOE RIVER	E. COLI	5120106030050	KOSCIUSKO	1.74	Miles
INB0635_T1040	TIPPECANOE RIVER	PCBs in FISH TISSUE	5120106030050	KOSCIUSKO	1.74	Miles
INB0643_00	DEER CREEK	E. COLI	5120106040030	MARSHALL	6.97	Miles
INB0643_T1001	DEER CREEK - HEADWATER TRIBUTARY	E. COLI	5120106040030	MARSHALL	2.11	Miles
INB0648_T1042	TIPPECANOE RIVER	PCBs in FISH TISSUE	5120106040080	FULTON	1.08	Miles
INB0654_T1018	TIPPECANOE RIVER	E. COLI	5120106050040	FULTON	10.27	Miles
INB0654_T1018	TIPPECANOE RIVER	PCBs in FISH TISSUE	5120106050040	FULTON	10.27	Miles
INB0657_T1001	UNNAMED TRIBUTARY (NEAR WOODROW, IN)	IMPAIRED BIOTIC COMMUNITIES	5120106050070	FULTON	5.00	Miles
INB0657_T1002	UNNAMED TRIBUTARY	IMPAIRED BIOTIC COMMUNITIES	5120106050070	FULTON	0.00	Miles
INB065A_00	MUD CREEK (UPSTREAM OF CESSNA DITCH)	E. COLI	5120106050100	FULTON	3.60	Miles
INB0669_T1024	TIPPECANOE RIVER	PCBs in FISH TISSUE	5120106060090	PULASKI	3.11	Miles
INB0692_T1003	TRAVERS DITCH	E. COLI	5120106090020	WHITE	2.07	Miles
INB0692_T1003	TRAVERS DITCH	IMPAIRED BIOTIC COMMUNITIES	5120106090020	WHITE	2.07	Miles
INB06A1_M1029	TIPPECANOE RIVER	PCBs in FISH TISSUE	5120106100010	PULASKI	0.48	Miles
INB06A2_01	ACKERMAN DITCH (DOWNSTREAM OF CR 1000N)	IMPAIRED BIOTIC COMMUNITIES	5120106100020	WHITE	2.51	Miles
INB06A2_T1004	UNNAMED CHANNEL (TO AND FROM TIPPECANOE RIVER)	PCBs in FISH TISSUE	5120106100020	WHITE	0.49	Miles
INB06A3_T1031	TIPPECANOE RIVER	PCBS (FISH TISSUE)	5120106100030	WHITE	3.07	Miles
INB06C7_01	HONEY CREEK	PCBS (FISH TISSUE)	51201061207	WHITE	37.25	Miles
INB06D1_01	TIPPECANOE RIVER (DOWNSTREAM OF TIMMONS DITCH)	NUTRIENTS	5120106130010	WHITE	1.34	Miles
INB06D1_01	TIPPECANOE RIVER (DOWNSTREAM OF TIMMONS DITCH)	PCBs in FISH TISSUE	5120106130010	WHITE	1.34	Miles
INB06F4_01	SPRING CREEK (DOWNSTREAM OF EMGE DITCH)	E. COLI	5120106150040	WHITE	3.43	Miles
INB06F4_T1002	SPRING CREEK - UNNAMED TRIBUTARY	E. COLI	5120106150040	WHITE	1.27	Miles
INB06F5_M1096	TIPPECANOE RIVER	PCBs in FISH TISSUE	5120106150050	TIPPECANOE	8.48	Miles
INB06F6_01	MYERS DITCH (ROUND GROVE TWP)	DISSOLVED OXYGEN	5120106150060	WHITE	1.15	Miles

WATERBODY AU ID	WATERBODY AU NAME	CAUSE OF IMPAIRMENT	HUC	COUNTY	SEGSIZE	UNIT
INB06F6_01	MYERS DITCH (ROUND GROVE TWP)	IMPAIRED BIOTIC COMMUNITIES	5120106150060	WHITE	1.15	Miles
INB06F8_M1097	TIPPECANOE RIVER	PCBs in FISH TISSUE	5120106150080	TIPPECANOE	2.94	Miles
INB0723_T1011	LITTLE WILDCAT CREEK (DOWNSTREAM OF VOGUS DITCH)	E. COLI	5120107020030	HOWARD	3.04	Miles
INB0841_01	BIG PINE CREEK (HEADWATER)	DISSOLVED OXYGEN	5120108040010	WHITE	3.37	Miles
INB0841_01	BIG PINE CREEK (HEADWATER)	IMPAIRED BIOTIC COMMUNITIES	5120108040010	WHITE	3.37	Miles
INB0841_T1001	BIG PINE CREEK - UNNAMED HEADWATER TRIBUTARY	DISSOLVED OXYGEN	5120108040010	WHITE	1.50	Miles
INB0841_T1002	VANNATTA - O'CONNER DITCHES	DISSOLVED OXYGEN	5120108040010	WHITE	3.31	Miles
INB0841_T1002	VANNATTA - O'CONNER DITCHES	IMPAIRED BIOTIC COMMUNITIES	5120108040010	WHITE	3.31	Miles
INB0841_T1003	ROUDEBUSH DITCH	DISSOLVED OXYGEN	5120108040010	WHITE	3.70	Miles
INB0844_T1002	OWENS DITCH	IMPAIRED BIOTIC COMMUNITIES	5120108040040	BENTON	3.83	Miles
INB08G1_01	BIG RACCOON CREEK (UPSTREAM OF WELLS DITCH)	E. COLI	5120108160010	BOONE	5.35	Miles
INB08G1_01	BIG RACCOON CREEK (UPSTREAM OF WELLS DITCH)	IMPAIRED BIOTIC COMMUNITIES	5120108160010	BOONE	5.35	Miles
INB08G1_T1002	WELLS DITCH	IMPAIRED BIOTIC COMMUNITIES	5120108160010	BOONE	3.00	Miles
INB08G9_T1042	SOUTH RAMP CREEK	IMPAIRED BIOTIC COMMUNITIES	5120108160090	PUTNAM	4.56	Miles
INB1011_T1004B	MALLOT DITCH	IMPAIRED BIOTIC COMMUNITIES	5120110010010	CLINTON	2.34	Miles
INB1014_01	WINCOOP DITCH (UPSTREAM OF SCOTT DITCH)	IMPAIRED BIOTIC COMMUNITIES	5120110010040	CLINTON	4.92	Miles
INB1017_T1002	BARNES DITCH	E. COLI	5120110010070	BOONE	3.21	Miles
INB1017_T1002	BARNES DITCH	IMPAIRED BIOTIC COMMUNITIES	5120110010070	BOONE	3.21	Miles
INB1018_01	BROWN'S WONDER CREEK	IMPAIRED BIOTIC COMMUNITIES	5120110010080	BOONE	7.93	Miles
INB1026_T1001	SUGAR CREEK	E. COLI	5120110020060	MONTGOMERY	5.20	Miles
INE0146_T1001	NEGLIE CREEK - UNNAMED TRIBUTARY	DISSOLVED OXYGEN	5140201040060	PERRY		Miles
INE0146_T1001	NEGLIE CREEK - UNNAMED TRIBUTARY	IMPAIRED BIOTIC COMMUNITIES	5140201040060	PERRY		Miles
INE017A_02	ANDERSON RIVER (DOWNSTREAM OF HUFFMAN, IN)	DISSOLVED OXYGEN	5140201070100	SPENCER	2.89	Miles
INE017A_02	ANDERSON RIVER (DOWNSTREAM OF HUFFMAN, IN)	E. COLI	5140201070100	SPENCER	2.89	Miles
INE017A_02	ANDERSON RIVER (DOWNSTREAM OF HUFFMAN, IN)	IMPAIRED BIOTIC COMMUNITIES	5140201070100	SPENCER	2.89	Miles
INE024C_T1004	PIGEON CREEK	PCBs in FISH TISSUE	5140202040120	VANDERBURGH	1.55	Miles
ING0333_T1009	GEPHART DITCH - UNNAMED TRIBUTARY	IMPAIRED BIOTIC COMMUNITIES	5080003030030	WAYNE	2.21	Miles
INJ01BB_T1007	TURKEY CREEK - UNNAMED TRIBUTARY	DISSOLVED OXYGEN	4050001110110	LAGRANGE	1.49	Miles
INJ01BB_T1007	TURKEY CREEK - UNNAMED TRIBUTARY	E. COLI	4050001110110	LAGRANGE	1.49	Miles

WATERBODY AU ID	WATERBODY AU NAME	CAUSE OF IMPAIRMENT	HUC	COUNTY	SEGSIZE	UNIT
INJ01BB_T1007	TURKEY CREEK - UNNAMED TRIBUTARY	IMPAIRED BIOTIC COMMUNITIES	4050001110110	LAGRANGE	1.49	Miles
INJ01C1_03	PIGEON RIVER (DOWNSTREAM OF ONTARIOU MILLPOND)	E. COLI	4050001120010	LAGRANGE	1.26	Miles
INJ01C6_T1001A	VAN NATTA DITCH - UNNAMED TRIBUTARY	PCBs in FISH TISSUE	4050001120060	LAGRANGE	1.48	Miles
INJ01E1_T1301	EMMA CREEK TRIB	AMMONIA	4050001140010	LAGRANGE	2.32	Miles
INJ01E1_T1301	EMMA CREEK TRIB	IMPAIRED BIOTIC COMMUNITIES	4050001140010	LAGRANGE	2.32	Miles
INJ01J2_01	CAROL CREEK	E. COLI	4050001180020	NOBLE	0.45	Miles
INJ01J2_01	CAROL CREEK	IMPAIRED BIOTIC COMMUNITIES	4050001180020	NOBLE	0.45	Miles
INJ01K3_02	STONY CREEK (DOWNSTREAM OF MILLERSBURG, IN)	E. COLI	4050001190030	ELKHART	1.76	Miles
INJ01K6_01	MAYER DITCH	CHLORIDE	4050001190060	ELKHART	3.92	Miles
INJ01K6_01	MAYER DITCH	DISSOLVED OXYGEN	4050001190060	ELKHART	3.92	Miles
INJ01K6_01	MAYER DITCH	E. COLI	4050001190060	ELKHART	3.92	Miles
INJ01K6_01	MAYER DITCH	IMPAIRED BIOTIC COMMUNITIES	4050001190060	ELKHART	3.92	Miles
INJ01K6_01	MAYER DITCH	NUTRIENTS	4050001190060	ELKHART	3.92	Miles
INJ01M7_01	BERLIN COURT DITCH (UPSTREAM OF AMIS ACRES)	DISSOLVED OXYGEN	4050001200070	ELKHART	1.48	Miles
INJ01M7_01	BERLIN COURT DITCH (UPSTREAM OF AMIS ACRES)	E. COLI	4050001200070	ELKHART	1.48	Miles
INJ01M7_01	BERLIN COURT DITCH (UPSTREAM OF AMIS ACRES)	NUTRIENTS	4050001200070	ELKHART	1.48	Miles
INJ01N2_01	ROCK RUN CREEK (UPPER)	E. COLI	4050001210020	ELKHART	2.53	Miles
INJ01N2_03	ROCK RUN CREEK (LOWER)	E. COLI	4050001210020	ELKHART	1.73	Miles
INJ01N4_01	SAINT JOSEPH RIVER	PCBS (FISH TISSUE)	40500012204	ST JOSEPH	3.04	Miles
INJ01N6_M1008	ST. JOSEPH RIVER	PCBs in FISH TISSUE	4050001210060	ELKHART	0.35	Miles
INJ01R1_01	WISLER DITCH	IMPAIRED BIOTIC COMMUNITIES	4050001230010	ELKHART	7.97	Miles
INJ01R1_01	WISLER DITCH	NUTRIENTS	4050001230010	ELKHART	7.97	Miles
INJ01T1_T1002A	ELLER DITCH - UNNAMED TRIBUTARIES (HEADWATERS)	E. COLI	4050001240010	ST. JOSEPH	2.47	Miles
INJ01T1_T1002B	ELLER DITCH - UNNAMED TRIBUTARY	E. COLI	4050001240010	ST. JOSEPH	2.26	Miles
INJ01T1_T1002C	ELLER DITCH - UNNAMED TRIBUTARY	E. COLI	4050001240010	ST. JOSEPH	1.71	Miles
INN04E1_T1040	BLUE RIVER	E. COLI	5140104140010	WASHINGTON	0.50	Miles
INN04JE_00	LITTLE BLUE RIVER - ALTON	PCBs in FISH TISSUE	5140104180140	CRAWFORD	6.52	Miles
INP0915_00	YOUNGS CREEK	E. COLI	5120209010050	ORANGE	6.32	Miles
INP0924_00	PATOKA RIVER-DUBOIS TRIBUTARYS	DISSOLVED OXYGEN	5120209020040	DUBOIS	5.52	Miles
INP0924_00	PATOKA RIVER-DUBOIS TRIBUTARYS	E. COLI	5120209020040	DUBOIS	5.52	Miles
INP0966_T1013	PATOKA RIVER	PCBs in FISH TISSUE	5120209060060	PIKE	2.46	Miles
INP0968_00	SUGAR CREEK (PIKE COUNTY)	DISSOLVED OXYGEN	5120209060080	PIKE	8.53	Miles
INP0985_T1017	PATOKA RIVER	PCBs in FISH TISSUE	5120209080050	GIBSON	4.41	Miles
INP0986_T1018	PATOKA RIVER	PCBs in FISH TISSUE	5120209080060	GIBSON	3.15	Miles
INV0384_03	LAUGHERY CREEK	MERCURY in FISH TISSUE	5090203080040	DEARBORN	1.06	Miles

WATERBODY AU ID	WATERBODY AU NAME	CAUSE OF IMPAIRMENT	HUC	COUNTY	SEGSIZE	UNIT
INV0384_03	LAUGHERY CREEK	PCBs in FISH TISSUE	5090203080040	DEARBORN	1.06	Miles
INW0145_00	KILLBUCK CREEK	PCBs in FISH TISSUE	5120201040050	DELAWARE	0.91	Miles
INW0159_00	PIPE CREEK - HAMILTON COUNTY	PCBs in FISH TISSUE	5120201050090	HAMILTON	1.05	Miles
INW01FF_T1124	EAST FORK WHITE LICK CREEK	IMPAIRED BIOTIC COMMUNITIES	5120201150150	MARION	0.75	Miles
INW0333_T1008	JONES CREEK	E. COLI	5120203030030	PUTNAM	7.97	Miles
INW0333_T1008	JONES CREEK	IMPAIRED BIOTIC COMMUNITIES	5120203030030	PUTNAM	7.97	Miles
INW0341_T1006	BIG WALNUT CREEK	E. COLI	5120203040010	PUTNAM	8.58	Miles
INW0341_T1006	BIG WALNUT CREEK	MERCURY in FISH TISSUE	5120203040010	PUTNAM	8.58	Miles
INW0341_T1027	MAIDEN RUN	IMPAIRED BIOTIC COMMUNITIES	5120203040010	PUTNAM	2.64	Miles
INW0342_T1007	BIG WALNUT CREEK	E. COLI	5120203040020	PUTNAM	4.41	Miles
INW0342_T1007	BIG WALNUT CREEK	MERCURY in FISH TISSUE	5120203040020	PUTNAM	4.41	Miles
INW0352_T1009	LITTLE DEER CREEK	IMPAIRED BIOTIC COMMUNITIES	5120203050020	PUTNAM	5.87	Miles
INW0394_T1016	EEL RIVER	IMPAIRED BIOTIC COMMUNITIES	5120203090040	CLAY	2.79	Miles
INW0631_T1002	SAND CREEK	E. COLI	5120206030010	DECATUR	8.43	Miles
INW0845_M1007	EAST FORK WHITE RIVER	PCBs in FISH TISSUE	5120208040050	LAWRENCE	1.98	Miles
INW08A3_M1009	EAST FORK WHITE RIVER	PCBs in FISH TISSUE	5120208100030	LAWRENCE	6.46	Miles
INW08H1_M1066	EAST FORK WHITE RIVER	PCBs in FISH TISSUE	5120208170010	MARTIN	1.40	Miles

IDEM Response: *The table below provides current AUIDs for all of the impairments in the table above. Most of these impairments were correctly added back under their new AUIDs to the 303(d) list with IDEM's April 1, 2014 submittal of its Integrated Report (IR). Where this is not the case, the table below provides notes to clarify why they do not appear on the 2014 303(d) list and any action remaining to be taken on IDEM's part.*

AUID in question by U.S. EPA	CAUSE OF IMPAIRMENT	2006_AUID	2008 AUID	2010 AUID	2012 AUID	2014 AUID	Notes
INA0466_T1022	NUTRIENTS	INA0466_T1022	INA0466_T1022	INA0466_T1022	INA0466_T1022	INA0466_08	
INA0466_T1022	PCBs in FISH TISSUE	INA0466_T1022	INA0466_T1022	INA0466_T1022	INA0466_T1022	INA0466_08	
INB0156_T1001	IMPAIRED BIOTIC COMMUNITIES	NOT INDEXED	NOT INDEXED	INB0156_T1001	INB0144_01	INB0144_01	This reach is located in the subwatershed 05120101050060. The TMDL for this impairment was approved in the Limberlost Creek watershed TMDL, #28 in Table 1 of IDEM's 2014 IR, Appendix H, Attachment 2 and correctly appears in Table 2 of Attachment 2). This was a new, high resolution reach indexed for the first time in 2010 and combined with INB0156_T1005 to make INB0144_01 for the 2012 cycle. . INB0144_01 correctly appears in Category 4A of IDEM's 2014 IR for impaired biotic communities. Therefore, no additional changes or corrections are needed.
INB0156_T1006	IMPAIRED BIOTIC COMMUNITIES	NOT INDEXED	NOT INDEXED	INB0156_T1006	INB0144_T1009A	INB0144_T1003	This reach is located in the subwatershed 05120101050060. The TMDL for this impairment was approved in the Limberlost Creek watershed TMDL, #28 in Table 1 of IDEM's 2014 IR, Appendix H, Attachment 2 and correctly appears in Table 2 of Attachment 2). This was a new, high resolution reach indexed for the first time in 2010. It was reindexed in 2012 and again in 2014 at which time it was combined with INB0156_T1007 to make INB0144_T1003. INB0144_T1003 correctly appears in Category 4A of IDEM's 2014 IR for impaired biotic communities. Therefore, no additional changes or corrections are needed.
INB0424_01	E. COLI	INB0424_01	INB0424_03	INB0424_03	INB0414_05	INB0414_05	
INB0432_00	E. COLI	INB0432_00	INB0432_03	INB0432_03	INB0434_T1011	INB0434_T1011	
INB0432_01	E. COLI	INB0432_01	INB0432_03	INB0432_03	INB0434_T1011	INB0434_T1011	

AUID in question by U.S. EPA	CAUSE OF IMPAIRMENT	2006_AUID	2008 AUID	2010 AUID	2012 AUID	2014 AUID	Notes
INB0432_01	E. COLI	INB0432_01	INB0432_03	INB0432_03	INB0434_T1011	INB0434_T1011	
INB0432_01	IMPAIRED BIOTIC COMMUNITIES	INB0432_01	INB0432_04	INB0432_04	INB0434_T1011	INB0434_T1011	
INB0432_01	IMPAIRED BIOTIC COMMUNITIES	INB0432_01	INB0432_04	INB0432_04	INB0434_T1011	INB0434_T1011	
INB0432_02	E. COLI	INB0432_02	INB0432_05	INB0432_05	INB0434_T1012	INB0434_T1012	
INB0459_00	E. COLI	INB0459_00	INB 459_00	INB459_00	INB0458_01	INB0458_01	
INB0459_00	E. COLI	INB0459_00	INB 459_00	INB459_00	INB0458_02	INB0458_02	
INB0471_T1004	IMPAIRED BIOTIC COMMUNITIES	INB0471_T1004	INB0471_T1004	INB0471_T1004	INB0474_T1008	INB0474_T1008	
INB0618_T1003	PCBs in FISH TISSUE	INB0618_T1003	INB0618_T1003	INB0618_T1003	INB0615_P1004	INB0615_P1004	This AUID was originally indexed as a reach of the Tippecanoe River located at the lower end of Tippecanoe Lake. This waterbody was re-indexed as an artificial path based on aerial photos in which it appears that it is actually part of the lake as opposed to a stream reach. Its original assessment was based on stream samples indicating impairment for PCBs in fish tissue. Lake Tippecanoe (INB06P1002_00) is also impaired based on lake samples and is correctly listed for PCBs. Because the originally listed reach is now considered part of Lake Tippecanoe, the impairment for PCBs in fish tissue is properly accounted for in the lake listing.
INB0635_T1040	E. COLI	INB0635_T1040	INB0635_T1040	INB0635_T1040	INB0635_01	INB0635_01	
INB0635_T1011	PCBs in FISH TISSUE	INB0635_T1011	INB0635_T1011	INB0635_T1011	INB0635_01	INB0635_01	
INB0635_T1040	PCBs in FISH TISSUE	INB0635_T1040	INB0635_T1040	INB0635_T1040	INB0635_01	INB0635_01	
INB0643_00	E. COLI	INB0643_00	INB0643_00	INB0643_00	INB0642_T1004	INB0642_T1004	
INB0643_T1001	E. COLI	INB0643_T1001	INB0643_T1001	INB0643_T1001	INB0642_T1004	INB0642_T1004	
INB0648_T1042	PCBs in FISH TISSUE	INB0648_T1042	INB0648_T1042	INB0648_T1042	INB0646_01	INB0646_01	
INB0657_T1002	IMPAIRED BIOTIC COMMUNITIES	INB0657_T1002	INB0657_T1002	INB0657_T1002	INB0654_T1001	INB0654_T1001	

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AUID in question by U.S. EPA	CAUSE OF IMPAIRMENT	2006_AUID	2008 AUID	2010 AUID	2012 AUID	2014 AUID	Notes
INB0657_T1001	IMPAIRED BIOTIC COMMUNITIES	INB0657_T1001	INB0657_T1001	INB0657_T1001	INB0654_T1001A	INB0654_T1001A	
INB065A_00	E. COLI	INB065A_00	INB065A_00	INB065A_00	INB0657_02	INB0657_02	
INB0654_T1018	E. COLI	INB0654_T1018	INB0654_T1018	INB0654_T1018	INB0659_02	INB0659_02	
INB0654_T1018	PCBs in FISH TISSUE	INB0654_T1018	INB0654_T1018	INB0654_T1018	INB0659_02	INB0659_02	
INB0669_T1024	PCBs in FISH TISSUE	INB0669_00	INB0669_00	INB0669_00	INB0666_01	INB0666_01	
INB0669_T1024	PCBs in FISH TISSUE	INB0669_T1024	INB0669_T1024	INB0669_T1024	INB0666_01	INB0666_01	
INB0692_T1003	E. COLI	INB0692_T1003	INB0692_T1003	INB0692_T1003	INB0681_T1002	INB0681_T1002	
INB0692_T1003	IMPAIRED BIOTIC COMMUNITIES	INB0692_T1003	INB0692_T1003	INB0692_T1003	INB0681_T1002	INB0681_T1002	
INB06A1_M1029	PCBs in FISH TISSUE	INB06A1_M1029	INB06A1_M1029	INB06A1_M1029	INB06C1_01	INB06C1_01	
INB06A2_T1004	PCBs in FISH TISSUE	INB06A2_T1004	INB06A2_T1004	INB06A2_T1004	INB06C1_01	INB06C1_01	
INB06A2_01	IMPAIRED BIOTIC COMMUNITIES	INB06A2_01	INB06A2_01	INB06A2_01	INB06C1_T1003	INB06C1_T1003	This impairment was inadvertently dropped from the 2014 303(d) list and will be added back to IDEM's 303(d) list with the forthcoming addendum to the 2014 IR.
INB06C7_01	PCBS (FISH TISSUE)	INB06C9_00	INB06C9_00	INB06C9_00	INB06C7_01	INB06C7_01	
INB06C7_01	PCBS (FISH TISSUE)	INB06CB_00	INB06CB_00	INB06CB_00	INB06C7_01	INB06C7_01	
INB06D1_01	NUTRIENTS	INB06D1_01	INB06D1_01	INB06D1_01	INB06C8_01	INB06C8_01	
INB06D1_01	PCBs in FISH TISSUE	INB06D1_01	INB06D1_01	INB06D1_01	INB06C8_01	INB06C8_01	
INB06F4_01	E. COLI	INB06F4_01	INB06F4_01	INB06F4_01	INB06D6_01	INB06D6_01	
INB06F4_T1002	E. COLI	INB06F4_T1002	INB06F4_T1002	INB06F4_T1002	INB06D6_01	INB06D6_01	
INB06F6_01	DISSOLVED OXYGEN	INB06F6_01	INB06F6_01	INB06F6_01	INB06D7_T1001	INB06D7_T1001	
INB06F6_01	IMPAIRED BIOTIC COMMUNITIES	INB06F6_01	INB06F6_01	INB06F6_01	INB06D7_T1001	INB06D7_T1001	
INB06F5_M1096	PCBs in FISH TISSUE	INB06F5_M1096	INB06F5_M1096	INB06F5_M1096	INB06D9_01	INB06D9_01	

AUID in question by U.S. EPA	CAUSE OF IMPAIRMENT	2006_AUID	2008 AUID	2010 AUID	2012 AUID	2014 AUID	Notes
INB06F8_M1097	PCBs in FISH TISSUE	INB06F8_M1097	INB06F8_M1097	INB06F8_M1097	INB06D9_01	INB06D9_01	
INB0723_T1011	E. COLI	INB0723_T1011	INB0723_T1011	INB0742_04	INB0742_04	INB0742_04	This impairment was listed under its new AUID in the IDEM's submittal of its 2014 303(d) list. However, the TMDL for this impairment was approved in the Middle Fork Wildcat Creek watershed TMDL (#36 in Table 1 of IDEM's 2014 IR, Appendix H, Attachment 2). Note that the original reach shown here (INB0723_T1011) does not appear in either the TMDL or U.S. EPA's approval letter. However, IDEM has verified that this was the result of an interim indexing effort that may not have been captured in IDEM's assessment database. IDEM has map-verified that this impairment is based on results collected from sites 11 and 13 shown in the TMDL and will be addressed by the loads developed and approved for this watershed. The E. coli impairment will be added to Category 4A with the submittal of its forthcoming addendum to its 2014 IR.
INB0841_01	DISSOLVED OXYGEN	INB0841_00	INB0841_01	INB0841_01	INB0841_02	INB0841_02	
INB0841_01	IMPAIRED BIOTIC COMMUNITIES	INB0841_00	INB0841_01	INB0841_01	INB0841_02	INB0841_02	
INB0841_T1001	DISSOLVED OXYGEN	INB0841_00	INB0841_T1001	INB0841_T1001	INB0841_T1004	INB0841_T1004	
INB0841_T1002	DISSOLVED OXYGEN	INB0841_00	INB0841_T1002	INB0841_T1002	INB0841_T1005	INB0841_T1005	
INB0841_T1002	IMPAIRED BIOTIC COMMUNITIES	INB0841_00	INB0841_T1002	INB0841_T1002	INB0841_T1005	INB0841_T1005	
INB0841_T1003	DISSOLVED OXYGEN	INB0841_00	INB0841_T1003	INB0841_T1003	INB0841_T1006	INB0841_T1006	
INB0844_T1002	IMPAIRED BIOTIC COMMUNITIES	INB0844_00	INB0844_T1002	INB0844_T1002	INB0844_T1004	INB0844_T1004	
INB08G1_01	E. COLI	INB08G1_T1034	INB08G1_T1034	INB08G1_01	INB08C1_01	INB08C1_01	
INB08G1_01	IMPAIRED BIOTIC COMMUNITIES	INB08G1_T1034	INB08G1_T1034	INB08G1_01	INB08C1_01	INB08C1_01	

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AUID in question by U.S. EPA	CAUSE OF IMPAIRMENT	2006_AUID	2008 AUID	2010 AUID	2012 AUID	2014 AUID	Notes
INB08G1_T1002	IMPAIRED BIOTIC COMMUNITIES	INB08G1_00	INB08G1_00	INB08G1_T1002	INB08C1_T1004	INB08C1_T1004	
INB08G9_T1042	IMPAIRED BIOTIC COMMUNITIES	INB08G9_T1042	INB08G9_T1042	INB08G9_T1042	INB08C5_T1008	INB08C5_T1008	
INB1011_T1004B	IMPAIRED BIOTIC COMMUNITIES	INB1011_00	INB1011_T1004B	INB1011_T1004B	INB1011_05	INB1011_05	
INB1014_01	IMPAIRED BIOTIC COMMUNITIES	INB1014_00	INB1014_01	INB1014_01	INB1012_T1007	INB1012_T1007	
INB1018_01	IMPAIRED BIOTIC COMMUNITIES	INB1018_00	INB1018_00	INB1018_00	INB1014_T1003	INB1014_T1003	
INB1017_T1002	E. COLI	INB1017_00	INB1017_00	INB1017_00	INB1015_T1006	INB1015_T1006	
INB1017_T1002	IMPAIRED BIOTIC COMMUNITIES	INB1017_00	INB1017_00	INB1017_00	INB1015_T1006	INB1015_T1006	
INB1026_T1001	E. COLI	INB1026_T1001	INB1026_01	INB1026_01	INB1045_01	INB1045_01	
INE0146_T1001	DISSOLVED OXYGEN	INE0146_00	INE0146_00	INE0146_T1001	INE0146_T1001	INE0112_T1007	
INE0146_T1001	IMPAIRED BIOTIC COMMUNITIES	INE0146_00	INE0146_00	INE0146_T1001	INE0146_T1001	INE0112_T1007	
INE017A_02	DISSOLVED OXYGEN	INE017A_T1047	INE017A_02	INE017A_02	INE017A_02	INE0145_02	
INE017A_02	E. COLI	INE017A_T1047	INE017A_02	INE017A_02	INE017A_02	INE0145_02	
INE017A_02	IMPAIRED BIOTIC COMMUNITIES	INE017A_T1047	INE017A_02	INE017A_02	INE017A_02	INE0145_02	This impairment was inadvertently dropped from the 2014 303(d) list and will be added back to IDEM's 303(d) list with the forthcoming addendum to the 2014 IR.
INJ01BB_T1007	DISSOLVED OXYGEN	INJ01BB_00	INJ01BB_T1007	INJ01BB_T1007	INJ01A8_T1008	INJ01A8_T1008	

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AUID in question by U.S. EPA	CAUSE OF IMPAIRMENT	2006_AUID	2008 AUID	2010 AUID	2012 AUID	2014 AUID	Notes
INJ01BB_T1007	E. COLI	INJ01BB_00	INJ01BB_T1007	INJ01BB_T1007	INJ01A8_T1008	INJ01A8_T1008	This impairment was listed under its new AUID in both Category 5 and Category 4A in IDEM's 2014 submittal of its IR. IDEM has verified that the TMDL for this impairment was approved in the Pigeon River watershed TMDL, #43 in Table 1 of IDEM's 2014 IR, Appendix H, Attachment 2 and correctly appears in Table 2 of Attachment 2. IDEM will remove this impairment from Category 5 with the submittal of its forthcoming addendum to its 2014 IR.
INJ01BB_T1007	IMPAIRED BIOTIC COMMUNITIES	INJ01BB_00	INJ01BB_T1007	INJ01BB_T1007	INJ01A8_T1008	INJ01A8_T1008	
INJ01C1_03	E. COLI	INJ01C1_T1300	INJ01C1_03	INJ01C1_03	INJ01B3_03	INJ01B3_03	This impairment was listed under its new AUID in both Category 5 and Category 4A in IDEM's 2014 submittal of its IR. IDEM has verified that the TMDL for this impairment was approved in the Pigeon River watershed TMDL,#43 in Table 1 of IDEM's 2014 IR, Appendix H, Attachment 2 and correctly appears in Table 2 of Attachment 2). IDEM will remove this impairment from Category 5 with the submittal of its forthcoming addendum to its 2014 IR.
INJ01C6_T1001A	PCBs in FISH TISSUE	INJ01C6_00	INJ01C6_T1001A	INJ01C6_T1001A	INJ01B6_T1002	INJ01B6_T1002	
INJ01E1_T1301	AMMONIA	INJ01E1_T1301	INJ01E1_T1301	INJ01E1_T1301	INJ01C1_T1005	INJ01C1_T1005	
INJ01E1_T1301	IMPAIRED BIOTIC COMMUNITIES	INJ01E1_T1301	INJ01E1_T1301	INJ01E1_T1301	INJ01C1_T1005	INJ01C1_T1005	
INJ01J2_01	E. COLI	INJ01J2_00	INJ01J2_01	INJ01J2_01	INJ01G2_01	INJ01G2_01	
INJ01J2_01	IMPAIRED BIOTIC COMMUNITIES	INJ01J2_00	INJ01J2_01	INJ01J2_01	INJ01G2_01	INJ01G2_01	
INJ01M7_01	DISSOLVED OXYGEN	INJ01M7_00	INJ01M7_01	INJ01M7_01	INJ01H6_01	INJ01H6_01	
INJ01M7_01	DISSOLVED OXYGEN	INJ01M7_T1291	INJ01M7_01	INJ01M7_01	INJ01H6_01	INJ01H6_01	
INJ01M7_01	E. COLI	INJ01M7_00	INJ01M7_01	INJ01M7_01	INJ01H6_01	INJ01H6_01	
INJ01M7_01	E. COLI	INJ01M7_T1291	INJ01M7_01	INJ01M7_01	INJ01H6_01	INJ01H6_01	

AUID in question by U.S. EPA	CAUSE OF IMPAIRMENT	2006_AUID	2008 AUID	2010 AUID	2012 AUID	2014 AUID	Notes
INJ01M7_01	NUTRIENTS	INJ01M7_00	INJ01M7_01	INJ01M7_01	INJ01H6_01	INJ01H6_01	
INJ01M7_01	NUTRIENTS	INJ01M7_T1291	INJ01M7_01	INJ01M7_01	INJ01H6_01	INJ01H6_01	
INJ01K3_02	E. COLI	INJ01K3_T1316	INJ01K3_02	INJ01K3_02	INJ01J1_03	INJ01J1_03	
INJ01K6_01	CHLORIDE	INJ01K6_00	INJ01K6_01	INJ01K6_01	INJ01J4_T1001	INJ01J4_T1001	
INJ01K6_01	DISSOLVED OXYGEN	INJ01K6_00	INJ01K6_01	INJ01K6_01	INJ01J4_T1001	INJ01J4_T1001	
INJ01K6_01	E. COLI	INJ01K6_00	INJ01K6_01	INJ01K6_01	INJ01J4_T1001	INJ01J4_T1001	
INJ01K6_01	IMPAIRED BIOTIC COMMUNITIES	INJ01K6_00	INJ01K6_01	INJ01K6_01	INJ01J4_T1001	INJ01J4_T1001	
INJ01K6_01	NUTRIENTS	INJ01K6_00	INJ01K6_01	INJ01K6_01	INJ01J4_T1001	INJ01J4_T1001	
INJ01N2_01	E. COLI	INJ01N2_00	INJ01N2_01	INJ01N2_01	INJ01K1_01	INJ01K1_01	
INJ01N2_03	E. COLI	INJ01N2_00	INJ01N2_03	INJ01N2_03	INJ01K1_01	INJ01K1_01	
INJ01R1_01	IMPAIRED BIOTIC COMMUNITIES	INJ01R1_00	INJ01R1_01	INJ01R1_01	INJ01M2_T1001	INJ01M2_T1001	
INJ01R1_01	IMPAIRED BIOTIC COMMUNITIES	INJ01R1_T1305	INJ01R1_01	INJ01R1_01	INJ01M2_T1001	INJ01M2_T1001	
INJ01R1_01	NUTRIENTS	INJ01R1_00	INJ01R1_01	INJ01R1_01	INJ01M2_T1001	INJ01M2_T1001	
INJ01R1_01	NUTRIENTS	INJ01R1_T1305	INJ01R1_01	INJ01R1_01	INJ01M2_T1001	INJ01M2_T1001	
INJ01N6_M1008	PCBs in FISH TISSUE	INJ01N6_M1008	INJ01N6_M1008	INJ01N6_M1008	INJ01N2_04	INJ01N2_04	
INJ01T1_T1002A	E. COLI	INJ01T1_00	INJ01T1_T1002A	INJ01T1_T1002A	INJ01N3_T1002	INJ01N3_T1002	
INJ01T1_T1002B	E. COLI	INJ01T1_00	INJ01T1_T1002B	INJ01T1_T1002B	INJ01N3_T1002	INJ01N3_T1002	
INJ01T1_T1002C	E. COLI	INJ01T1_00	INJ01T1_T1002C	INJ01T1_T1002C	INJ01N3_T1002	INJ01N3_T1002	
INJ01N4_01	PCBs in FISH TISSUE	INJ01T2_M1005	INJ01T2_M1005	INJ01T2_M1005	INJ01N4_01	INJ01N4_01	This impairment was inadvertently dropped from the 2014 303(d) list and will be added back to IDEM's 303(d) list with the forthcoming addendum to the 2014 IR.
INN04JE_00	PCBs in FISH TISSUE	INN04JE_00	INN04JE_00	INN04JE_00	INN04JE_00	INN04B7_02	
INN04JE_00	PCBs in FISH TISSUE	INN04JE_00	INN04JE_00	INN04JE_00	INN04JE_00	INN04B7_03	
INN04E1_T1040	E. COLI	INN04E1_T1040	INN04E1_T1040	INN04E1_T1040	INN04E1_T1040	INN0485_02	
INP0915_00	E. COLI	INP0915_00	INP0915_00	INP0915_00	INP0915_00	INP0912_T1006	

AUID in question by U.S. EPA	CAUSE OF IMPAIRMENT	2006_AUID	2008 AUID	2010 AUID	2012 AUID	2014 AUID	Notes
INP0924_00	DISSOLVED OXYGEN	INP0924_00	INP0924_00	INP0924_00	INP0924_00	INP0942_02	
INP0924_00	E. COLI	INP0924_00	INP0924_00	INP0924_00	INP0924_00	INP0942_02	
INP0966_T1013	PCBs in FISH TISSUE	INP0966_T1013	INP0966_T1013	INP0966_T1013	INP0966_T1013	INP0964_01	
INP0968_00	DISSOLVED OXYGEN	INP0968_00	INP0968_00	INP0968_00	INP0968_00	INP0964_02	IDEM has verified that all data collected on this reach in 2001, 2006, and 2012 indicate full support. Therefore, no additional changes or corrections are needed.
INP0968_00	DISSOLVED OXYGEN	INP0968_00	INP0968_00	INP0968_00	INP0968_00	INP0964_T1005	
INP0985_T1017	PCBs in FISH TISSUE	INP0985_T1017	INP0985_T1017	INP0985_T1017	INP0985_T1017	INP0984_01	
INP0986_T1018	PCBs in FISH TISSUE	INP0986_T1018	INP0986_T1018	INP0986_T1018	INP0986_T1018	INP0985_01	
INV0384_03	MERCURY in FISH TISSUE	INV0384_T1035	INV0384_03	INV0384_03	INV0384_03	INV0372_02	
INV0384_03	PCBs in FISH TISSUE	INV0384_T1035	INV0384_03	INV0384_03	INV0384_03	INV0372_02	
INW0145_00	PCBs in FISH TISSUE	INW0145_00	INW0145_00	INW0145_00	INW0137_01	INW0137_01	
INW0159_00	PCBs in FISH TISSUE	INW0159_00	INW0159_00	INW0159_00	INW0147_01	INW0147_01	
INW01FF_T1124	IMPAIRED BIOTIC COMMUNITIES	INW01FF_T1124	INW01FF_T1124	INW01FF_T1124	INW01D9_01	INW01D9_01	
INW0333_T1008	E. COLI	INW0333_T1008	INW0333_T1008	INW0333_T1008	INW0333_T1008	INW0322_03	
INW0333_T1008	IMPAIRED BIOTIC COMMUNITIES	INW0333_T1008	INW0333_T1008	INW0333_T1008	INW0333_T1008	INW0322_03	
INW0352_T1009	IMPAIRED BIOTIC COMMUNITIES	INW0352_T1009	INW0352_T1009	INW0352_T1009	INW0352_T1009	INW0331_02	
INW0341_T1006	E. COLI	INW0341_T1006	INW0341_T1006	INW0341_T1006	INW0341_T1006	INW0345_01	
INW0341_T1006	MERCURY in FISH TISSUE	INW0341_T1006	INW0341_T1006	INW0341_T1006	INW0341_T1006	INW0345_01	
INW0342_T1007	E. COLI	INW0342_T1007	INW0342_T1007	INW0342_T1007	INW0342_T1007	INW0345_02	
INW0342_T1007	MERCURY in FISH TISSUE	INW0342_T1007	INW0342_T1007	INW0342_T1007	INW0342_T1007	INW0345_02	

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AUID in question by U.S. EPA	CAUSE OF IMPAIRMENT	2006_AUID	2008 AUID	2010 AUID	2012 AUID	2014 AUID	Notes
INW0341_T1027	IMPAIRED BIOTIC COMMUNITIES	INW0341_T1027	INW0341_T1027	INW0341_T1027	INW0341_T1027	INW0345_T1002	
INW0394_T1016	IMPAIRED BIOTIC COMMUNITIES	INW0394_T1016	INW0394_T1016	INW0394_T1016	INW0394_T1016	INW0385_01	
INW0631_T1002	E. COLI	INW0631_T1002	INW0631_T1002	INW0631_T1002	INW0631_T1002	INW0631_01	
INW0845_M1007	PCBs in FISH TISSUE	INW0845_M1007	INW0845_M1007	INW0845_M1007	INW0845_M1007	INW08A3_01	
INW08A3_M1009	PCBs in FISH TISSUE	INW08A3_M1009	INW08A3_M1009	INW08A3_M1009	INW08A3_M1009	INW08A6_01	
INW08H1_M1066	PCBs in FISH TISSUE	INW08H1_M1066	INW08H1_M1066	INW08H1_M1066	INW08H1_M1066	INW08F2_01	
INB0155_T1013	IMPAIRED BIOTIC COMMUNITIES	NOT INDEXED	INB0155_T1011B	INB0155_T1011B	INB0141_T1008	INB0141_T1008	This reach is located in the subwatershed 05120101050050. The TMDL for this impairment was approved in the Limberlost Creek watershed TMDL, (#28 in Table 1 of IDEM's 2014 IR, Appendix H, Attachment 2). INB0155_T1013 was assigned its AUID prior to its indexing at high resolution. When the reach was indexed, it was instead assigned the AUID INB0155_T1011B. It was later reindexed to INB0141_T1008. No additional changes or corrections are needed.
INB06A3_T1031	PCBs in FISH TISSUE	INB06A3_T1031	INB06A3_T1031	INB06A3_T1031	INB06A3_T1031	INB06C2_01	This reach appears incorrectly in Indiana's reach index as an artificial path (INB06A3_P1031). The AUID was changed to INB06A3_T1031 in IDEM's assessment database for the 2006 cycle at which time it was listed for PCBs in Fish Tissue. This reach has since been reindexed to INB06C2_01, which correctly appears listed for PCBs in fish Tissue on IDEM's April 1, 2014 303(d) list. No additional changes or corrections are needed.

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AUID in question by U.S. EPA	CAUSE OF IMPAIRMENT	2006_AUID	2008 AUID	2010 AUID	2012 AUID	2014 AUID	Notes
ING0333_T1009	IMPAIRED BIOTIC COMMUNITIES	ING0333_T1009	ING0333_T1009	NOT INDEXED	NOT INDEXED	NOT INDEXED	This reach was inadvertently dropped from the Reach Index when this watershed was re-indexed and as a result no longer appears on the map. IDEM has verified with aerial photos that the stream still exists and will need to be added back to the Reach Index. IDEM has also verified that it has no biological data to support this impairment. Therefore, this reach will not be added back to IDEM's 303(d) list.
INE024C_T1004	PCBs in FISH TISSUE	INE024C_T1004	INE024C_T1004	INE024C_T1004	NOT INDEXED	NOT INDEXED	This reach was inadvertently dropped from the Reach Index when this watershed was re-indexed and as a result no longer appears on the map. IDEM has verified with aerial photos that the stream still exists and will need to be added back to the Reach Index at which time IDEM will map and evaluate any fish tissue data available to verify whether the data used to make the original assessment applies to this reach. In the meantime, this impairment will be added back to IDEM's 303(d) list with the forthcoming addendum to the 2014 IR.

13. The table below includes a series of AU IDs that were identified as resegmented in Attachment 4 Table of IR2014_Appendix_H_303dNOC, but these AU IDs were not found under the provided segmentation tracking file. State needs to provide the corresponding segmentation tracking info. Since IDEM considers algae an indicator variable for nutrient impairment in stream assessments, is expected that the new AU IDs should have been listed for nutrients unless a delisting rational is otherwise provided.

WATERBODY AU ID	WATERBODY AU NAME	CAUSE OF IMPAIRMENT	BASIN	HUC	COUNTY	SEGSIZE	UNIT
INB0841_01	BIG PINE CREEK (HEADWATER)	ALGAE	LOWER WABASH	5120108040010	WHITE	3.37	Miles
INB0841_T1001	BIG PINE CREEK - UNNAMED HEADWATER TRIBUTARY	ALGAE	LOWER WABASH	5120108040010	WHITE	1.50	Miles
INB0841_T1002	VANNATTA - O'CONNER DITCHES	ALGAE	LOWER WABASH	5120108040010	WHITE	3.31	Miles
INB0841_T1003	ROUDEBUSH DITCH	ALGAE	LOWER WABASH	5120108040010	WHITE	3.70	Miles

IDEM Response: *The table below provides current AUIDs for all of the impairments in the table above. The algae impairments were added back to IDEM's April 1, 2014 submittal of its Integrated Report (IR) as nutrient impairments, listed under the 2014 AUIDs shown in the table below.*

AUID in question by U.S. EPA	Original Cause of Impairment	2006_AUID	2008 AUID	2010 AUID	2012 AUID	2014 AUID	2014 Cause of Impairment
INB0841_01	ALGAE	INB0841_00	INB0841_01	INB0841_01	INB0841_02	INB0841_02	NUTRIENTS
INB0841_T1001	ALGAE	INB0841_00	INB0841_T1001	INB0841_T1001	INB0841_T1004	INB0841_T1004	NUTRIENTS
INB0841_T1002	ALGAE	INB0841_00	INB0841_T1002	INB0841_T1002	INB0841_T1005	INB0841_T1005	NUTRIENTS
INB0841_T1003	ALGAE	INB0841_00	INB0841_T1003	INB0841_T1003	INB0841_T1006	INB0841_T1006	NUTRIENTS

14. The table below includes a series of AU IDs that were identified as resegmented in Attachment 4 Table of IR2014_Appendix_H_303dNOC, but the new AU IDs identified under the provided segmentation tracking file don't appear as listed for the corresponding cause of impairment under the Cat5 list submitted, and no delisting reasons were provided. The State needs to clarify.

WATERBODY AU ID	WATERBODY AU NAME	CAUSE OF IMPAIRMENT	BASIN	HUC	COUNTY	SEGSIZE	UNIT	New AU ID
INA0448_T1003B	BLUHM DITCH	IMPAIRED BIOTIC COMMUNITIES	GREAT LAKES	4100004040080	ADAMS		Miles	INA0447_T1004
INN0134_T1034	INDIAN KENTUCK CREEK	E. COLI	OHIO TRIBUTARIES	5140101030040	JEFFERSON	1.95	Miles	INN0125_02
INP0952_00	FLAT CREEK - BUCK CREEK	DISSOLVED OXYGEN	PATOKA RIVER	5120209050020	PIKE	17.37	Miles	INP0952_01 INP0952_T1002 INP0952_T1003 INP0952_T1004 INP0952_T1005
INP0953_T1065	LITTLE FLAT CREEK	SILTATION	PATOKA RIVER	5120209050030	DUBOIS	6.11	Miles	INP0953_T1005 INP0953_T1006
INV0338_02	SALT FORK CREEK (DOWNSTREAM OF TURKEY FORK)	E. COLI	OHIO TRIBUTARIES	5090203030080	DEARBORN	1.78	Miles	INV0333_05 INV0333_T1009
INW0312_00	MAIN EDLIN DITCH-SMITH DITCH	E. COLI	WHITE RIVER, WEST FORK	5120203010020	BOONE		Miles	INW0311_01
INW0313_00	MAIN EDLIN DITCH-GRASSY BRANCH	E. COLI	WHITE RIVER, WEST FORK	5120203010030	BOONE		Miles	INW0311_01 INW0311_T1002
INW0342_00	MILL CREEK	E. COLI	WHITE RIVER, WEST FORK	5120203040020	PUTNAM	11.89	Miles	INW035C_03
INW0367_00	MUD CREEK-LOWER (HENDRICKS)	E. COLI	WHITE RIVER, WEST FORK	5120203060070	MORGAN	5.47	Miles	INW0354_02

IDEM Response: *The table below provides current AUIDs for all of the impairments in the table above. Most of these impairments were correctly added back under their new AUIDs to the 303(d) list with IDEM's April 1, 2014 submittal of its Integrated Report (IR). Where this is not the case, the table below provides notes to clarify why they do not appear on the 2014 303(d) list and any action remaining to be taken on IDEM's part.*

AUID in question by U.S. EPA	CAUSE OF IMPAIRMENT	2006_AUID	2008 AUID	2010 AUID	2012 AUID	2014 AUID	Notes
INA0448_T1003B	IMPAIRED BIOTIC COMMUNITIES	INA0448_00	INA0448_00	INA0448_00	INA0448_00	INA0447_T1004	IDEM has map verified that the original reach was incorrectly listed under an interim AUID. The correct original AUID for this reach was INA0448_00. IDEM has also verified that this reach was not included in the St. Mary's TMDL approved on September 22, 2006 and that fish community data collected in 2005 supports original assessment. This impairment will be added to Category 5 with IDEM's forthcoming addendum to its 2014 IR.
INN0134_T1034	E. COLI	INN0134_T1034	INN0134_T1034	INN0134_T1034	INN0134_T1034	INN0125_02	Recent data indicates full support.
INP0952_00	DISSOLVED OXYGEN	INP0952_00	INP0952_00	INP0952_00	INP0952_00	INP0952_01	Recent data (collected in 2012) indicates impairment of this reach. This impairment will be added to Category 5 with IDEM's forthcoming addendum to its 2014 IR.
INP0952_00	DISSOLVED OXYGEN	INP0952_00	INP0952_00	INP0952_00	INP0952_00	INP0952_T1002	IDEM has verified that it has no data to support assessment of this reach.
INP0952_00	DISSOLVED OXYGEN	INP0952_00	INP0952_00	INP0952_00	INP0952_00	INP0952_T1003	IDEM has verified that it has no data to support assessment of this reach.
INP0952_00	DISSOLVED OXYGEN	INP0952_00	INP0952_00	INP0952_00	INP0952_00	INP0952_T1004	IDEM has verified that it has no data to support assessment of this reach.
INP0952_00	DISSOLVED OXYGEN	INP0952_00	INP0952_00	INP0952_00	INP0952_00	INP0952_T1005	Recent data indicates full support.
INP0953_T1065	SILTATION	INP0953_T1065	INP0953_T1065	INP0953_T1065	INP0953_T1065	INP0953_T1005	The siltation impairment on this reach was approved by U.S. EPA for Category 4C and appears in Table 5 of IDEM's IR, Appendix H, Attachment 2 (Status of Category 4 Waters).

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AUID in question by U.S. EPA	CAUSE OF IMPAIRMENT	2006_AUID	2008 AUID	2010 AUID	2012 AUID	2014 AUID	Notes
INP0953_T1065	SILTATION	INP0953_T1065	INP0953_T1065	INP0953_T1065	INP0953_T1065	INP0953_T1006	The siltation impairment on this reach was approved by U.S. EPA for Category 4C and appears in Table 5 of IDEM's IR, Appendix H, Attachment 2 (Status of Category 4 Waters).
INV0338_02	E. COLI	INV0338__T1023	INV0338_02	INV0338_02	INV0338_02	INV0334_T1005	
INW0312_00	E. COLI	INW0312_00	INW0312_00	INW0312_00	INW0312_00	INW0311_01	
INW0313_00	E. COLI	INW0313_00	INW0313_00	INW0313_00	INW0313_00	INW0311_01	
INW0313_00	E. COLI	INW0313_00	INW0313_00	INW0313_00	INW0313_00	INW0311_T1002	
INW0342_00	E. COLI	INW0342_00	INW0342_00	INW0342_00	INW0342_00	INW035C_03	This impairment appears in Category 5 of IDEM's 2014 IR under its new AUID. However, IDEM has verified data are insufficient for assessment (minimum data requirements not met). This impairment will be removed from Category 5 with IDEM's forthcoming addendum to its 2014 IR.
INW0367_00	E. COLI	INW0367_00	INW0367_00	INW0367_00	INW0367_00	INW0354_02	The E. coli impairment on this reach was approved by U.S. EPA for Category 4A and appears under its original AUID associated with TMDL #13 in Table 2 of IDEM's IR, Appendix H, Attachment 2 (Status of Category 4 Waters).

15. Please provide the sizing and priority information for all of the waterbody assessment units (AUs) listed in Indiana's 2014 303(d) list.

IDEM Response: *IDEM provided priority information in Appendix H of its 2014 Integrated Report in the file entitled: 2012IRAppendix_H_Att1_TMDLSchedule.pdf. IDEM also provided in its 2014 submittal all the geospatial data needed to determine the sizes of all the AUs listed on its 303(d) list. It should be noted that because IDEM is still in the process of finalizing its high resolution reach index, any size information it provides to U.S. EPA may yet change. With this caveat noted, IDEM will provide the requested mileage values with its forthcoming addendum to its 2014 Integrated Report.*

16. Additional inquiries about specific waterbody AUs/impairments listing/delisting issues.
Placeholder: ***Given the fact that EPA's approval process for the Indiana's 2012 303(d) list is currently ongoing, EPA may submit additional comments about specific waterbody AUs/impairments issues that may affect Indiana's 2014 303(d) list as it completes Indiana's 2012 303(d) list approval process.***